

THE ATHLETIC JOURNAL

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APRIL, 1931



Suggestions on Conducting
Track Meets

Harry S. Gill



Relay Racing and Track Meets

A. M. Barron

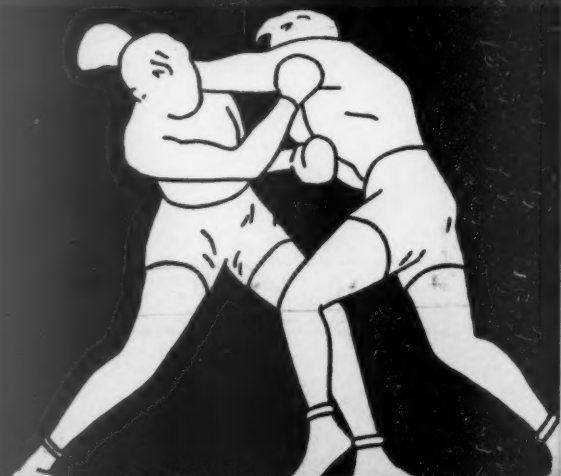


The College Track and Field
Honor Roll



A Philosophy of College
Athletics

John L. Griffith



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Making Athletics Uninteresting

NO one can quarrel with those who have noted the shortcomings of our various institutions and who are suggesting that improvement in the management of those institutions is desirable. When a man becomes complacently satisfied with things, he ceases to grow; and, when a nation is satisfied that it has reached the heights, it cannot progress further. Retrogression is then in order. We should be on guard, nevertheless, against the quack remedies which are being offered as nostrums for our many ills. The Farm Board was created to aid the farm industry, and in support of the Board and its activities the government has spent several hundred million dollars with the result that the benefits that have accrued to the farmers are negligible. The Wickersham Commission very laboriously, painstakingly, and carefully, studied the liquor question, but it is difficult to see how that Commission has materially helped to solve this problem.

Most of our state legislatures have appointed investigating committees of various sorts. There is hardly a college or university in the country that does not have some investigating committee at work studying this or that phase of educational procedure and technique. Perhaps we are being over-investigated. In the writer's judgment, however, investigations and studies are a mark of progress just so long as we are not led to scrap present methods for new methods which have not yet been proved superior to the old. As a people, we have a blind faith in legislation, in resolutions, and in new schemes to work miracles. In athletics, some would restrict school and college games with the idea of making them uninteresting. If they succeed they will not kill football, basketball and track, but, rather, will surrender the field to other promoting agencies. The newspapers throughout the country this year have been promoting various types of amateur athletics in a successful and creditable manner. Other organizations are following the example of the newspapers, and, when the time comes, if ever, that our school and college athletics have been restricted to the point that they are of little interest to the players and public, then it is easy to see that our school and college boys will in larger and larger numbers compete in the games and tournaments sponsored and conducted by others than the schools and colleges.

During our years of prosperity, the radical wing of the physical education group and the school and college men who have an antipathy for inter-institutional athletics, kept more or less in the background. Today they are rather conspicuous. One of the leaders of the minority faction has boldly suggested that a high school should not conduct any athletics for the superior athletes, but, rather, such lads should be encouraged to sign up with the professional and semi-professional teams in the community in which their high school is located. There have always been a few who have held this or similar opinions relative to high school athletics, but, so far, they have not been able to make much headway. If school and college athletics are administered by men who believe in these activities, the radicals will not gain much ground.

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CONTENTS

Suggestions on Conducting Track Meets.....	5
<i>Harry S. Gill</i>	
Relay Racing and Track Meets.....	7
<i>A. M. Barron</i>	
The College Track and Field Honor Roll.....	10
<i>E. W. Bates</i>	
<i>Nat J. Cartmell</i>	
<i>D. G. Griffiths</i>	
<i>J. E. Martie</i>	
<i>Emil Von Elling</i>	
<i>Ralph Young</i>	
Athletic Expansion at Xavier University.....	13
<i>Joseph A. Meyer</i>	
The Physical Education Plant and Program in a High School of 2,000 Students.....	14
<i>W. L. Childs</i>	
Haverford College Automatic Race Timer	18
<i>Edwin A. Speakman</i>	
A Philosophy of College Athletics.....	20
Professional and Amateur Athletics	
The Competitive Spirit and Championships	
College Coaches	
The Alumni and College Athletics	
Athletic Recruiting and Subsidizing	
<i>John L. Griffith</i>	
An Intramural	45
Program for State Teachers Colleges	
<i>Lloyd E. Rountree</i>	
Second Wind	49
<i>Towner Smith</i>	

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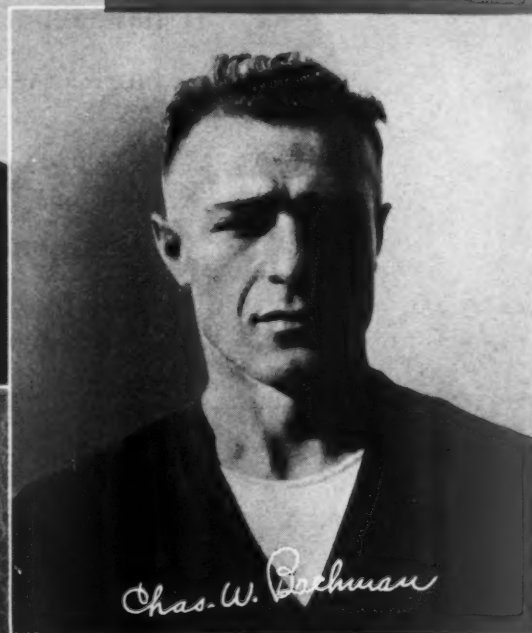
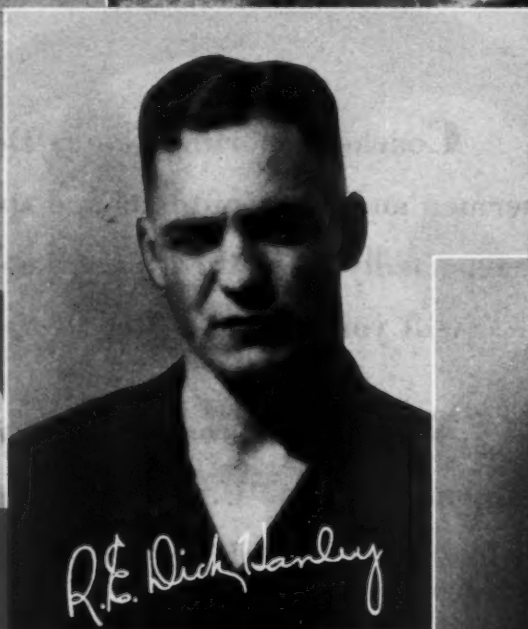
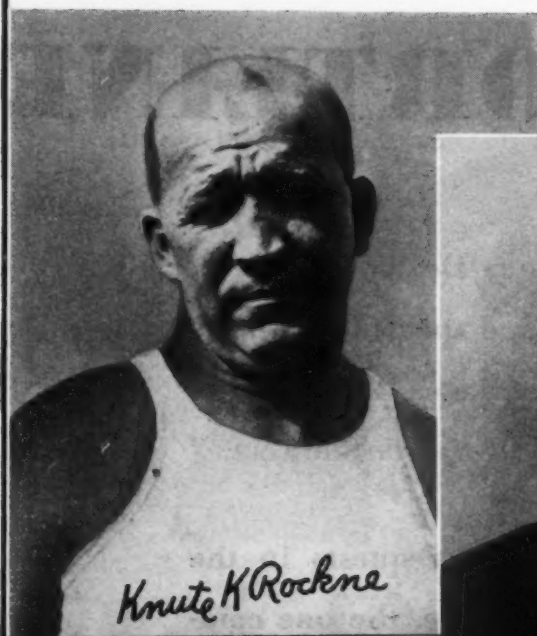
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The ATHLETIC JOURNAL

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1931



A start at the Illinois Indoor Relay Carnival

Suggestions on Conducting Track Meets

By Harry S. Gill

THERE is a general lack of interest by spectators at track and field meets in the field events, and especially the weight throwing events. I think this is due very largely to confusion and also because in most instances the spectators have no way of knowing what is going on. In other words the events are poorly staged.

In order to remedy the situation and to stimulate general interest in track and field meets I have some suggestions to make on the conduct of practice and competition in field and track, with particular reference to certain weight throwing events.

There is another point to be considered, and that is danger,—danger, not only to some spectators, but to the officials and the competitors themselves. I have sat through many big meets and watched javelins and discuses fly back and forth for two to three hours with both officials and

athletes in these and other events in constant danger of being hit by wild and careless throwers.

I am quite convinced that the average spectator could not tell when the actual contest started or ended. Every one who is at all familiar with some of these events, particularly the discus and javelin throws, is kept uneasy un-

til the event is over. This to my way of thinking is all unnecessary, and may be completely avoided. The suggestions that I want to make are taken largely from my observations of the methods employed at the 1928 Olympic Games. These suggestions were outlined for the Drake Relays and will be followed out at their 1931 Meet.

I think there are three points to be considered:

1. Making the event safe; reducing to a minimum the possibility of accident.

2. Giving every contestant a fair and equal opportunity to deliver his best performance.

3. Staging the event so as to make it more spectacular and interesting for spectators.

1. Divide contestants into groups of not more than six, and have a set time to start the first group and second and third groups in order. Provide a warming up field outside of the

***S**INCE 1904 Harry S. Gill has coached track athletes at the University of Illinois. A former Canadian and American champion himself, he had developed many famous track and field athletes. He has been largely responsible for the success of the Illinois Indoor Relay Carnival. A more detailed account of his life appeared in the February ATHLETIC JOURNAL.*



Verne McDermont, one of the outstanding college vaulters, developed at Illinois

stadium, or field where the meet is to be held, even if it has to be quite a distance away, and send a messenger to each group at the proper time. Do not permit any practice throwing in the stadium, or field where the meet is to be held. Nothing but the competitive throws with this one exception:—Permit each contestant to take one trial before the event to test his run on competitive ground or circle.

2. Dividing the throwers into groups improves their chance of getting out their very best because they don't have to wait so long between turns. Have them all take one throw; then measure. Repeat for the number of turns allowed by the rules. Have a bench where throwers may sit while waiting their turn.

3. Have the throwing field well marked with large numbers, indicating distance. Surround the entire throwing field with rope and stakes and have guards to allow no one inside except the officials. Have each thrower announced with megaphone just as he is about to start his turn or run. Announce all the leading throws. With this method of conducting the contest, when a throw is made it will attract the attention of the spectators.

In the javelin throw each javelin should be allowed to remain where it sticks until after all throws are made and each distance properly measured. In the discus throw and shot put each throw should be marked with a flag or other suitable identifying marking device, all implements to be carried back to the throwing point. This is very important from the standpoint of safety. The bad feature of return throwing, in addition to the extreme danger to the officials and other con-

testants on the field, is that it is very confusing to the spectators.

In the case of every day practice the same precautions should be taken as in competition. Therefore practice should be regulated and supervised in order to eliminate possibility of accidents, and I would suggest that when a number are practicing together that the throwers follow a regular order of taking their turns. Under no circumstances should return throws be permitted. I realize that this will slow up practice, but it is this very thing that has caused the trouble. By observing the foregoing, practice will be made an hour of interesting recreation, which it is intended to be.

Concerning the javelin and discus throws. Have your field arrangements all set for the show and do not change this on account of a little adverse conditions. In some cases a wind blowing from a certain direction may cause the competitors to ask that a change in throwing direction be made. This should not be permitted. It is as fair for one to throw against

NOT only are field events, as usually staged, uninteresting to the spectators, but some of them are even dangerous to the competitors and officials, believes Mr. Gill.

To remedy the situation, he suggests the following three points to be considered in conducting these events—especially the javelin, discus and shot put.

1. Making the event safe; reducing to a minimum the possibility of accident.
2. Giving every contestant a fair and equal opportunity to deliver his best performance.
3. Staging the event so as to make it more spectacular and interesting for spectators.

the wind as another, and part of the game. When the starting minute arrives, announce the first man up and go. This plan may also apply to the shot put, broad jump and hop, step and jump.

In general the whole field and track is too much cluttered up in too many meets. I believe that a lot of the warming up that is done on the track and in the field might be done away with by confining the practice or warming up exercise to certain designated places on the field or track, or in the gymnasium or field house. For the warming up of weight throwing

events this ought to be done on some field other than the field on which the competition is being held. In order to eliminate this confusion have the contestants report to officials at the point designated for practice or warming up, and after the warming up has been accomplished have them taken directly to the starting points or stations. After each event the contestants should leave the track or field immediately.

In unregulated practice, coaches, attendants and spectators, as well as other participants, must be constantly on guard, and this takes the fun out of this form of recreation unnecessarily.

All throwers should begin their practice with easy throwing of the implement. In the case of the javelin if a bank or elevated piece of ground is available this makes an excellent place to warm up. In the absence of such, throwers may warm up and get the throwing action by throwing into the ground a few feet in front of them. They may also use the run and complete form in this warming up exercise.

These suggestions do not apply to warming up where there are only two or three on the field. In such cases these may throw the discus or javelin back and forth between them, provided they pay close attention to what they are doing. Practice should always be made under competitive conditions as to circles, throwing lines, etc., just as the rules require in competition.

It is a well established fact that these throwing events are splendid developers of all-around physique.



Illinois hurdlers, present and past—Lee Sentman and Carl Werner, the latter now coaching under Gill

Relay Racing and Track Meets

By A. M. Barron

Track Coach, Temple University

Relay Racing

HISTORY was being written, when in 1893 Princeton at the invitation of the University of Pennsylvania sent four quarter milers to compete in the first relay race ever held in collegiate circles.

Little did they realize that the event, originated as a novelty, might be the saviour, athletically and financially, of track, the sport from which it emanated.

From the origin and history of the Pennsylvania Relays, we learn that the relay races were immediately popular with the public; so much so that in 1895 the University of Pennsylvania started the first intercollegiate carnival. In 1915, this carnival became a two day meet. The carnival, which is truly the track classic of the world, exceeds the Olympic Games in the number of contestants. Last season, there was an entry list of 524 schools and colleges, 100 events and 3,000 contestants. On the final day, there were between 35,000 and 40,000 spectators to see the meet.

Following the example of Pennsylvania, John L. Griffith in 1909 started the Drake Relays at Des Moines, Iowa. These races were successful and are held annually on the same days as the University of Pennsylvania Relays. Later Georgia Tech at Atlanta followed with the Southern Relays.

Relay carnivals were successful wherever tried, and the idea spread to all parts of the United States. Last season, Kansas, Ohio State, South Dakota, Texas, Rice and Washington (of Seattle) universities conducted outdoor relay carnivals. The University of Illinois each year has a well conducted and elaborate indoor relay carnival, and Marquette University has an outdoor relay carnival for high and preparatory schools. There are also numerous smaller relay carnivals in all sections of United States, all based on the Pennsylvania model.

England has also instituted a relay carnival. The relay program has become an important feature in the National A. A. U. Championships and of the Olympic Games.

Some of the relay carnivals have novelty events, such as the football relay at Drake, where members of college football teams are the only eligi-

ble competitors. The University of Pennsylvania has a shuttle hurdle relay, which is always an exciting race and which adds color to the games.

The relay program is the only form of track and field sports which is well supported in the Eastern and Middle Western sections of the United States. However, on the Pacific Coast the public in great numbers will go to see the dual meets of some of their great universities.

Relay races, from the spectators' viewpoint, are excellent for the shorter distances and races up to 880 yards, but, for distance events, the race develops too quickly into a leader and so many followers. Such an event is lacking in thrills, and many of these events never develop into real races, but just another win for the leading team.

The writer believes that, instead of a four-mile relay race, a team race of the same four men, all running one mile at the same time, would be far better, for it would give more actual competition for the runners, more thrills for the spectators and would be run off in much less time. In such a team race, the winning team would be the one which has its four runners finish with the lowest score, as in a cross-country race. The first runner would score one, the second would score two, the third would score three points, etc. Then the placings would be added together for the total score. Low score would win.

Relay races meet the criticism often heard of track and field sports, that the competitors are too much concerned about their own performances and therefore become too individualistic; that their individualism develops into a lack of the ability to cooperate later in the business world. Relay races are cooperative to the 'nth degree. They are won and many times lost on the cooperation or lack of cooperation of team mates in the passing of the baton.

In relay carnivals, one has but to watch the crowd in order to learn that the public—the supporters of the meet, do not consider time as the greatest element of the meet. It is keen competition and races that are won by small margins that make the relays exciting for them. At the University of Pennsylvania Relay Races last season, this was demon-

strated in the one-mile relay which Harvard University won, in the 440-yard relay which the University of Chicago won, in the 440-yard relay which Mercersburg Academy won, and in the one-mile race which Conger won. All were close races and won by small margins and they thrilled the crowd. The spectators would rather have keen competition in a slow race than see a record placed on the books, with the runner leading by thirty yards in a mile race, because they do not know whether a record has been set until some one—sometime after the race is over—tells them. They want to see contests where the thrills come often. They are not much interested in new records, except where the creating of the new record provides keen competition.

As an official in an interscholastic track meet two years ago, my attention was especially drawn to the importance of relay races to create spirit and enthusiasm. The enthusiasm had been fair throughout the afternoon, but when the medley relay started, which was the last event on the program, the latent spirit of the rooters was shown and their enthusiasm knew no bounds. In a college track meet last season my attention was again drawn to the relay race as a creator of life and enthusiasm for the meet. In interscholastic meets, relay races are excellent, except for tired athletes who have run in other events during the same meet.

Many physical educators have probably noticed that, in physical education classes when relay races are run, the classes are much more difficult to control. The relay may be a four-man, or it may be a ten or twenty-man relay. The effect is the same; enthusiasm runs high, the students are excited and they enjoy the races. This is not so true of sprint races where the runners compete as individuals.

In the writer's experience, relay races have created interest and enthusiasm more quickly in any group of boys than any other of the sports, and, in the future, relay races will probably predominate in track meets except in the longer distance events, in which the time of running the races will be considered.

Last spring, at the writer's suggestion, an experimental dual relay meet

between two high schools was tried. There were the usual short, middle distance and medley relays. The boys who saw the meet were the usual rooters for their team while the field events were being run off as in a standard dual meet. Their enthusiasm was lukewarm. As soon as the relays were started, all was changed; these casual rooters became very enthusiastic, and there was a tenseness about the meet which is usually found at football games. There was an indefinable something which changed the entire atmosphere of the meet. It remained until the last relay had been run. It seemed that all knew immediately that, instead of so many individuals running for their team, in each race was a team from their school on which individuals were running. The spectators seemed to have sensed a vast difference. There was no organized cheering at this meet, but it was as much needed as at football games, for there was much indiscriminate rooting by students from both schools.

The coach of one of the competing teams, R. H. Coates, expressed the advantages of this type of competition as follows:

(1) It increases the runner participation through the use of two or three teams in each event.

(2) It simplifies and expedites the running of the meet through the elimination of heats.

(3) It has greater interest for the spectators.

(4) It makes for greater team consciousness and for more school spirit.

The disadvantage which he expressed is this:

(1) It is a departure from the standard meet and thus does not give the runner adequate preparation for the final championship meet.

The following were the most essential points of this dual relay meet.

The one-mile run, 120 high hurdles, 220 low hurdles, high jump, pole vault and running broad jump were continued as in the standard dual meet.

The relay races were restricted to 880 yards or under that distance.

First and second teams (4 runners on each team) participated in all relay races.

The following relays were run:

440-yard—each 110 yards.

880-yard—each 220 yards.

Two-mile—each 880 yards.

Middle medley—order—220-440-440-880 yards.

Sprint medley—order—110-220-330-440 yards.

The following field events were all started at the same time:

Broad jump, shot put, pole vault, high jump.

The order of running events:

1—120 high hurdles (heats).

2—One-mile run.

3—Relay—440-yard.

4—120 high hurdles (final).

5—Relay—two miles.

6—220 low hurdles (heats).

7—Relay—880-yard.

8—Relay—middle medley.

9—220 low hurdles (final).

10—Relay—sprint medley.

The point system used:

Dual meets—1st, 10 points; 2nd, 8 points; 3rd, 6 points.

Triangular meets—1st, 10 points; 2nd, 8 points; 3rd, 6 points; 4th, 4 points.

The number of runners needed for various distances for one team in each meet:

110 yards	5
220 yards	6
330 yards	1
440 yards	3
880 yards	5

Total20

There are many variations to this kind of a meet. The 880-yard may be run as in the standard dual meet, then the one-mile relay may be substituted for the two-mile relay.

The middle medley may be a 220-440-440-660, or the sprint medley a 110-220-220-330, in order to run an even number of laps on a quarter-mile track.

The one mile may be run as a team race; that is, the four members of each team scoring the lowest number of points as in cross-country be awarded first place, the next highest second place, etc.

The Philadelphia Public High Schools will experiment again during this coming outdoor season with a relay meet. Dual and triangular meets will be tried.

Should the conference meets of the future be divided into three separate sections—track events, field events, relay events—it is easy to guess which section will have the greatest public support. It will be the section which in 1893 was selected as a novelty event—*relay races*.

DID you ever wonder why a dual track meet between two great universities would draw only a few hundred persons while a football team game between the same institutions would draw many thousands of persons?

Why will the I. C. A. A. A. A., the oldest of the organized college conferences in track and field sports, which is over fifty years old, draw a smaller crowd at their championship meet than does the University of Pennsylvania at their first football game with one of the smaller colleges?

Why will only the so-called "dyed in the wool fans," many of them former competitors, go out to see the track meets?

The athletes in track are just as well trained as those in football. In some cases they are the same men competing as members of both teams, and there should be just as many real, live American people who want to enjoy clean sport in the spring as in the fall.

Track, in trying to be the aristocrat of the sports and not adjusting itself sufficiently to obtain the support of the public, inflicts itself financially upon football, for football bears the financial burden of all other college sports with the possible exception of basketball, a relatively new sport, when compared with track and field. At each institution at which I have coached I have been the football and track coach, but my wishes have always been that track might financially bear its own burden and pay its own expenses. The burden of track is assumed only because the athletic directors in the colleges and universities consider track too fine a sport to let go to seed. Many changes and adjustments must be made in track before it can hope for much public support.

While track answers the question of diversification of school and college sports, as John L. Griffith, Commissioner of the Western Conference points out, "the track coaches have tended to make the sport more or less of an exact science." They have eliminated as many turns as possible in races in trying to create new records. They have placed too much emphasis on records and not enough emphasis on the educational values or cooperative spirit of sport and by so doing they have eliminated many tense, thrilling moments of the real race; thus, much of the enjoyment for the spectator is lost.

Mr. Griffith also states that no track and field crowd should be required to wait more than two hours to witness the beginning and the end of a track meet; in other words that *speed* by the officials in the running of the meet is more important to the spectators than speed by the athletes in the meet. In order to run off college track meets quickly:

1. Each athlete might be restricted to two running events, as is done in

many college and interscholastic meets at the present time.

2. A certain allotted time might be allowed for the athlete to complete his throw, his jump, his vault, etc., as is done with success in some of the relay carnivals.

Track and field needs more color, thrills and tenseness to be made more interesting to spectators. In football games the spectators do not care for records. They want to see their favorite team win, but most of all they want to see keenly contested games. The tenseness of such games draws the gigantic crowds. "The Greatest Show on Earth," is the way one great football coach once expressed the game of football. While track may never compete with football for immense crowds, it should be a better show than it is at the present time. If you do not believe that the average spectator at a football game considers the game a show and wants to be amused, recall what the spectators did at the last game you saw, when the referee in following a play too closely was accidentally clipped from the rear, or the linesman knocked down, or the water bucket spilled, or some other equally trivial incident happened.

They laughed and considered it a huge joke. They probably derived more pleasure from the incident and talked more about it than they would about a spectacular forty-yard run. The public goes to a football game or to any athletic contest to be amused, and that is as it should be, for if it were not so, great crowds would not be so easily handled at these games.

The intense interest in track, the writer believes, will be developed in the team or relay races. The public is not so much interested in Johnny Jones of Penn as it is in a team of the University of Pennsylvania of which Johnny Jones is a member. Track events are so constructed that they become individualistic, unless run as team events or relay races. Institutions that have considered for various reasons the dropping of track from their list of sports should especially change programs in order to create more student and public interest by the use of such races. It is the writer's belief that it can be done, working for the best interest of the sport and without the cry of over-emphasis. Eventually, this type of race will predominate in track meets, for keenly contested team or relay races, quickly run off, so that the emotions of the crowd do not grow cold, should draw more spectators.

Field events are individualistic, and, so far as the public is concerned, it is difficult to make of them a team event, because the public asks for immediate

results. If the spectators see the contestant throw the javelin and (by signs indicating distances on the field) know immediately that the throw is approximately two hundred feet, *they are interested*. This is also true of the shot put. In the hammer and discus, the contestants' throws may be at so many various angles that, until the judges have measured them, the spectators know practically nothing of the relative distances, even though the officials of the meet may have arcs marked on the ground. It is very difficult to create intense interest in such events.

Championship meets may be more interesting if the so-called "advance dope" by track coaches is not published, in order to save more of the unexpected for the final meet. The elimination of the official timers in dual meets might aid in creating more interest for the championship meet. It would cut down the quota of officials needed for the dual meets, and only the coaches would know of the capabilities of their men and of the opponents.

All contestants in sprint races should be required to return to their respective lanes at the end of the race and stay there until dismissed by the referee or chief track judge. Such procedure would be a great aid to the officials in picking and placing the men in their proper order of finishing the race. With the competitors at the finish line, mistakes may easily be corrected, which later may become a difficult matter. This is especially true where numbers are not properly placed or easily seen on the competitors. It would also enable the public to see at close range the competitors who ran the race, and thus add more interest and enjoyment to the meet for the spectators.

Jerseys of the school color and having on the back the number of the boy and the initial of the institution, as H-9 or P-11, is a great aid to track officials, especially in dual meets, or in meets where there are no printed programs. It is seldom in the same league or conference that two institutions have exactly the same color scheme for their jerseys. This scheme is better than paper numbers, pinned on the jerseys, for too many of them are lost or improperly placed.

If track gains in popularity, stadiums should be built more suitable for the efficient handling of track meets. Races should be run where the spectators can see them. It may mean the running of the 100-yard dash and the 120-yard high hurdles on the grass. Too many sprint races are run so close to retaining walls of stadiums that practically no one sees the entire

race from the grandstand, unless one is in the stands on the opposite side of the field, when field glasses are needed properly to see the runners.

It has been suggested that tracks be designed with a double chute, one diagonally opposite the other in order to have all the races finish on the same side of the track. Another suggestion which has been previously made is that the longest distance races be run off first—in college meets the two-mile run, in high school meets the one-mile run—the events which spectators least like to see. Late arrivals would then not miss the more exciting races. Such suggestions merit consideration and trial.

The starting block, the subject recently of many controversies, will eventually come into its own in track meets. The same controversy arose when the spiked shoes were first introduced. In the near future, instead of a trowel to dig up the track for the starting of sprint races, there will be small compact blocks, easily driven into the track with a rubber mallet and quickly removed after the race. When this happens, sprint races will be run off much more quickly and efficiently. While the use of the starting blocks may be an aid in conducting championship meets, they can do the greatest good in giving impetus to short sprint races in physical education classes and in intramural sports, especially in races run without the aid of spiked shoes, for with the starting blocks the novice must assume approximately the proper starting stance. From observation I know that novices are more easily interested in practicing starts with the blocks than without them. Are they artificial? Yes, but as Dr. Bilik states in his book, "Healthful Living," so are clothes, and, in short, almost everything that is modern. He might have added, concerning track, the spikes on the runners' shoes, and also the practice of allowing the runner to dig holes in the ground to act as a brace for his feet in starting the race.

The writer thinks that for high school boys the height of the high hurdles should be reduced from three feet six inches to three feet three inches, for the same reason that the school boy shot putters use the twelve-pound shot instead of the sixteen-pound shot, a question of maturity of the boy. A little experimenting with school boy hurdlers will show that better races will be obtained if the high hurdle races are run over hurdles which are three feet three inches in height.

The Pennsylvania Interscholastic Athletic Association, the controlling

association of high school athletics of the state of Pennsylvania, has eliminated the high hurdle event from its track and field program. The reason stated was that the high hurdles were too hard a race physically on the boy. The low hurdle event was kept on the program, which is a much more taxing event physically than the high hurdles. The reasoning was fallacious, as any one knows who has run both the high and low hurdles. The statement should have been that the high hurdles are too high for the average school boy, and thus too difficult an event to perform, except for a tall boy with long legs. My belief is that even such a boy, immature as he is, would do better work over the lower height and find it a more enjoyable race. The race is an easy event physically on the average boy because he never learns to step or properly run the hurdles, but does a high jumping act over each hurdle.

Edward L. Farrell in his article, "Is the College Track Athlete Deteriorating?" in December, 1930, THE ATHLETIC JOURNAL states, "The aver-

age age of the athlete of today is a year younger than the average age in 1920. One year is a tremendous handicap at this particular time of life." If that statement is true of the college athlete of today, the boys are certainly graduating from high and preparatory schools one year younger, which is another reason for greater protection of the high school boy in track work.

The high school runner competing in track is probably the easiest of all the high school athletes to burn out, yet on some track and field programs a high school boy is allowed to run the 440-yard and the 880-yard events on the same afternoon. These two races are too strenuous for any boy of high school age, especially in championship meets where qualifying heats must be run the day before the final races.

In order to give the public and former competitors a better opportunity to see the meet after their working day is completed, the final day of the Philadelphia Public High School Championship Track and Field Meet this coming outdoor season will be

started at 7:00 P. M., Daylight Saving Time.

A few years ago there were three sets of basketball rules. The Joint Committee solved that problem. At the present time there are three sets of track and field rules. Could they not be condensed into one set, based upon those of the International Federation? Surely the minor points in which they differ could be adjusted by a Joint Committee of the three interested associations.

The track and field program has probably remained unchanged for too long a time. More experimental meets should be tried, with reports as to the results. What is suitable for the colleges and universities may not be best for the preparatory and high schools. It is well for us to remember that college relay racing was first placed on a track program as a novelty event. It is not the problem of one coach or one group of coaches, but the problem of all the track coaches of the United States, whether coaching in universities, colleges, preparatory schools, high schools or athletic clubs.

The College Track and Field Honor Roll

IN the February issue of THE ATHLETIC JOURNAL were published brief sketches of most of the athletes placed on the 1930 Track and Field Honor Roll. Because information on some of these men was not available at that time, the reports were necessarily omitted then, but are included in the present article.

Of Chamberlain, Mr. Young writes: "Clark S. Chamberlain, another midget distance runner, remains a constant source of surprise to those who knew him when he first entered college. Weighing but 111 pounds at seventeen years of age when he first reported for cross-country and with absolutely no high school athletic experience of any kind, he was a decidedly poor prospect from every angle.

"In a few weeks he gave evidence of unlimited stamina in spite of his ludicrous form and extremely frail physique. His progress the first year was slow but steady, and his initial appearances in intercollegiate competition consisted of a series of sharp defeats. His speed was gradually built up so that in the late spring of 1930 he was able to perform exceptionally at both the mile and two mile. During the summer of 1930 he gained a good

deal of experience in A. A. U. competition, placing in both the National A. A. U. Junior mile and the National A. A. U. Senior six-mile runs, and competing as a member of the United States three-mile team in the meet with the British Empire. He was the

second American to finish in this event.

"After a short rest, he took up training for cross-country and a great improvement in both form and speed was at once apparent. He swept through the cross-country season without defeat, setting course records in each performance, and climaxed the season by winning the I. C. A. A. A. A. championship at Van Cortlandt Park, running the rain-soaked six-mile course in 30:19. In spite of his acquired speed, Chamberlain is a true long-distance runner. He runs nearly flat-footed and at full speed there is little change in his style. In the spring of 1930 he was doubled in the mile and two mile in nearly every meet and turned in his fastest two mile races after having run the mile, half an hour previously. He has become considerably more rugged and now weighs about 135 pounds, is big-chested and broad-shouldered. In his training schedule most emphasis is laid on developing speed over distances of from half to three-quarters of a mile. His exceptional stamina makes possible rigorous efforts to improve this speed and his deficient sprinting ability."



Kenneth Robison, University of Nevada



(Above)
IKE HABLES
Stanford University



(Above, center)
EMERY CURTICE
University of California



(Above, right)
SOL FURTH
New York University

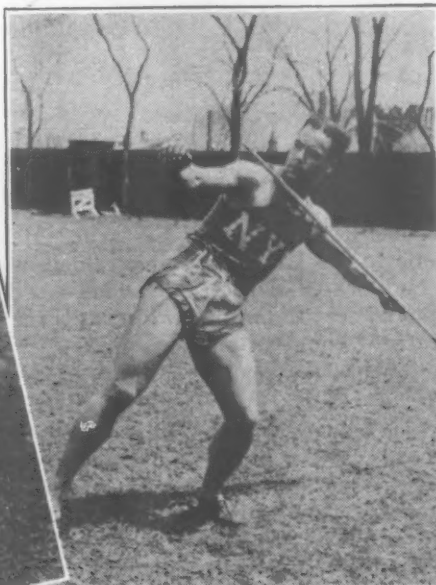


(Below)
CHARLES ENGLE
Yale University

(Left)
KENNETH CHURCHILL
University of California

(Below, center)
DAVE MYERS
New York University

(Below)
CLARK CHAMBERLAIN
Michigan State





PAUL REKERS
Penn State

"Kenneth Robison, who won a place on the National Collegiate Honor Roll in the 220 dash because of his record of 21.3 seconds in the Far Western Conference Meet, is a native of Nevada. He was a star high school athlete at Sparks, Nevada, and still holds records in the 50-yard, 100-yard, and 220-yard dashes for high schools in this state. In college, he was a consistent performer in the dashes and a valuable member of the relay teams.

"He is a fair starter, gathering momentum quickly, is a strong runner and enjoys competition. I have never seen him lose a race when he was in condition. His performance is noteworthy because of the fact that he was always handicapped by weather conditions that did not allow training until late in March." This information came from J. E. Martie, Director of Athletics at the University of Nevada.

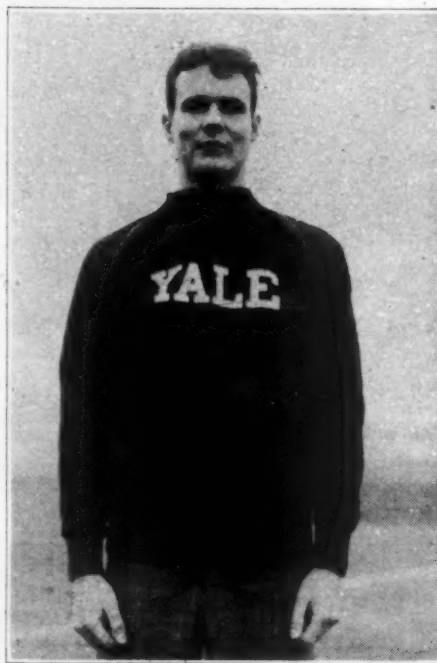
Emery Curtice, javelin thrower of the University of California track teams of 1928-1930, completed his career as an intercollegiate competitor last June at the N.C.A.A. meet at Chicago and the I.C.A.A.A.A. meet at Soldiers' Field, placing fourth in the latter meet. His best throw of the 1930 season was 210 feet even, $\frac{1}{4}$ of an inch better than his California Intercollegiate record of 209 feet $9\frac{3}{4}$ inches, which was made in 1929 and which stands at present.

Curtice also took second place in the I.C.A.A.A.A. meet of 1929, but in 1930 was unable to improve his high form

of the previous year. During 1930 he was consistent at better than 195 feet. Due, however, to the superiority of his team mate, Kenneth Churchill, and the excellent competition afforded by other Pacific Coast colleges—notably Southern California and University of Washington—he was forced to be content with second or third places in all meets except that with the Olympic Club of San Francisco and in the California Intercollegiates.

His 210-foot toss was made in the Olympic Club meet, and his first place in the Intercollegiates was earned with a throw of 204 feet 1 inch. His next best mark, 202 feet 4 inches, took second place in the California-Stanford 'Big Meet,' Churchill's throw being 3 feet better.

Curtice captained the California team in 1929 but, having another year of competition remaining at the close of that season, returned as a member of the team in 1930. In his last two years, notably the 1929 season, he ex-



GEORGE V. WOLF
Yale University

perienced trouble with his arm. He came to the University unheralded as a high school athlete, but added more than 40 feet to his throw during three years of competition.

Kenneth Churchill, another University of California javelin star and present holder of the Intercollegiate record with a throw of 212 feet 5 inches, has shown an equal improvement. Unlike Curtice, Churchill had a wide reputation as a high school athlete. He is now competing in his third and final year.

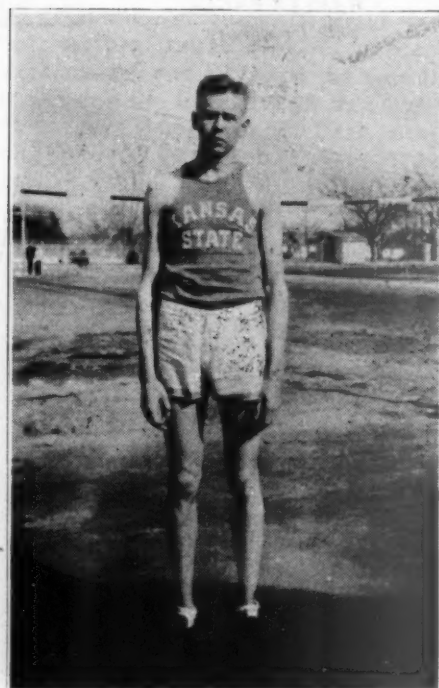
In qualifying at the last I.C.A.A.A.A., Churchill broke the existing rec-

ord, set by Kibby of Stanford University the year previous, with a throw of better than 207 feet, and in the final competition broke his own record.

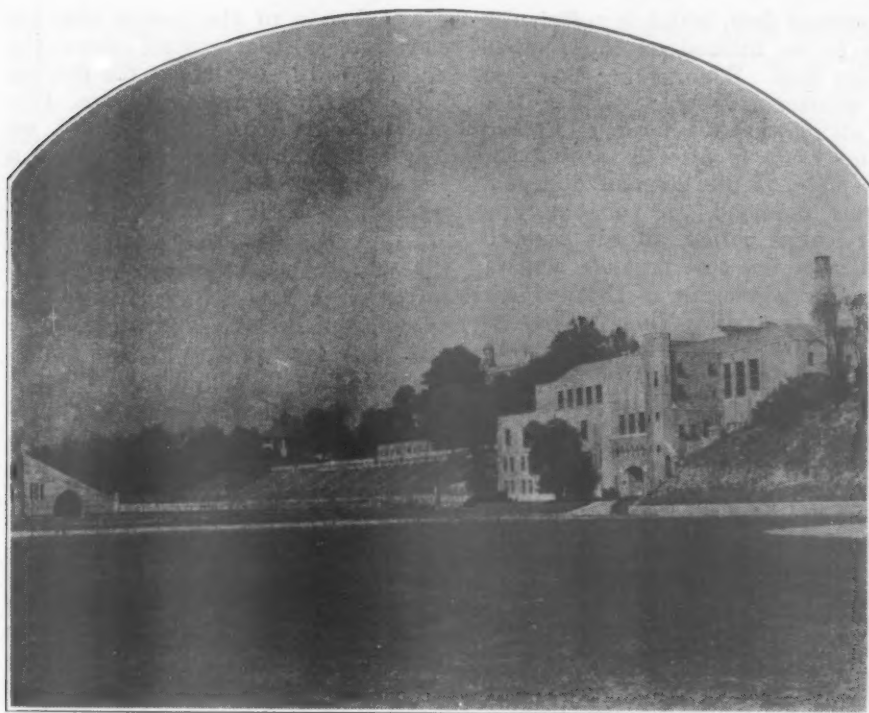
He is also the present holder of the California-Stanford record—he beat Kibby in setting it in 1929—of 209 feet 7 inches. As a junior in 1930, he showed improvement at the start of the season, slumped for a time and then reached his peak for the I.C.A.A.A.A. competition. A week after this meet, he placed first in the N.C.A.A., at 204 feet 2 inches. He had previously won his event in the California-Stanford meet with a throw of 205 feet 1 inch.

Churchill has been consistent at 195 feet or better for two seasons. Possessed of extremely long arms, he is much more loosely knit than Curtice, who gives the impression of great compactness in his performance. Where Curtice had no more than ordinary difficulty in timing his run, Churchill has frequently been unable to time his last step and the release of the javelin correctly. In a number of meets, his last step has bothered him to such extent as to throw him completely off form and, peculiarly enough, some of his best throws have been made after he has patiently corrected the difficulty during the course of the competition. He has had little or no trouble with his throwing arm, possibly in part due to the fact that he is large boned and strong. Early workouts under poor field conditions indicate that he should have a good season this spring."

Coach Emil Von Elling writes as
(Continued on page 50)



M. EHRLICH
Kansas State



The New Xavier Stadium and Memorial Field House

Athletic Expansion at Xavier University

By Joseph A. Meyer

Director of Athletics and Football Coach

XAVIER UNIVERSITY, founded in 1831 and now observing its centenary year, has included a modern physical education and intercollegiate athletic program among the activities that have expanded rapidly as material development of the institution has been recorded during the past decade.

Xavier, which is one of the oldest educational institutions west of the Allegheny mountains, only within the past eleven years has been able to include a well-coordinated campus among its facilities. It is only a little over a decade ago that the then ninety-year old St. Xavier College, predecessor of the present Xavier University, was centered in downtown Cincinnati, occupying the greater part of a city block that has been rapidly surrounded by commercial development.

With the acquisition of the campus in Avondale-Evanston, two of the choicest residential suburbs of the city, Xavier has enjoyed both material expansion and student achievement that has heralded the last decade as the most glorious in its century of service.

In a little more than eleven years, Xavier University authorities have developed the present site from a sylvan tract of approximately fifty acres into a well-balanced university campus with eight commodious buildings and a modern stadium marking achievement to date, and two additional buildings projected for the centenary year.

The architectural keynote of the

Xavier University development is marked by Tudor Gothic. Besides the University stadium erected at a cost of over \$350,000, raised by civic subscription and representing all the most modern developments in construction, Xavier completed eight buildings in the past decade.

The physical educational equipment centers around the \$325,000 Memorial Field House, a gift of Walter S. Schmidt, '05, and the stadium provided by public subscription, as related previously. The field house, 226 by 246 feet overall, is unique in the fact that it was built over a ravine, 100 feet in width and 250 feet in length with a difference of some 40 feet between the bottom of the ravine and the top of the slope surrounding it. The dirt floor, measuring 230 by 105 feet, was placed in the valley of this ravine, with the north and south sides of the hills forming a comparatively inexpensive foundation for the 3,500 inclined permanent seats. After very little hand grading upon the slopes a concrete slab four inches thick, together with concrete stringers, was erected. Upon the stringers three 12-inch planks were placed. These planks form the seats and their width gives ample foot room.

Due to the nature of the terrain, the exterior walls of the field floor proper are only 12 feet high; at the same time we have a ceiling height of 34 feet over the basketball court. We estimated this construction effected a saving of \$30,000.

A twelve-lap to the mile track with a 60-yard straightaway is placed about the section 94-foot by 50-foot basketball floor, which has proved satisfactory without question or doubt. In the latter part of March, tennis courts are marked on the field house floor, enabling this sport to be carried on indoors despite weather conditions. In the fall the courts are harrowed, and football practice may be held during inclement weather.

The offices of the Department of Physical Education and the student locker rooms have been conveniently placed in that section of the field house immediately adjacent to the stadium.

The lockers in the varsity dressing room are 18 by 18 by 78 inches in size. They are placed back to back on concrete curbs 6 inches above the floor, below which are placed eight 1½-inch steam lines. The bottoms and tops of lockers are perforated, as is the front below the bottom. The tops are connected to an exhaust system. Special connections to the main boilers allow us to heat only the lockers during the early warm days of fall. It may seem surprising, but only three or four bushels of coal are necessary to dry thoroughly the uniforms in September. The front of the lockers, excepting the portion below the bottom, is not perforated. When the exhaust fan is operated, air is drawn from the room over the steam coils and through the uniforms, thereby drying them and eliminating foul air

from the dressing room at all times. Adjoining this room are the showers.

We have avoided the mistake of allowing steam from the showers to permeate the dressing room, first by having a great number of radiators in the shower room, and, second, by connecting the showers to the exhaust system. If shower rooms have sufficient heat (other than that caused by hot water) the possibility of having steam enter the remainder of the building will be reduced to a minimum.

The \$350,000 stadium, financed successfully by public contributions, was similarly built in a natural amphitheater, again effecting a saving in excavation and construction of piers. The stadium is built of rock and concrete with rosewood seats bracketed to the risers. Its present capacity is 15,000, with 100 private boxes. Provision for future expansion by construction of additional seats will give the stadium an ultimate capacity of 35,000. A modern press box 80 feet long, with all conveniences, affords newspapermen the facilities necessary for the reporting of the games.

To the north of the stadium are the tennis courts, and adjacent thereto

the baseball field, which is sufficiently large to be utilized as the football practice field. Surrounding this field is a quarter mile track with a 150-yard straightaway. A concrete stand seating 1,500 is directly behind the home plate of the baseball diamond. A grass diamond, the equal of any major league outlay, affords baseball enthusiasts the best possible playing field. No admission is charged for collegiate baseball. This is done to help promote baseball not only as an intercollegiate sport but as our contribution toward this great American pastime.

At the beginning of the 1930 football season, night playing was inaugurated with remarkable success. Instead of the conventional poles, six steel towers 100 feet high and four feet square were erected. Three of these towers were placed on each side of the field behind the stadium, thereby giving the spectators an unobstructed view of the playing field.

Sixty 1500-watt projectors, 26 inches in diameter, were installed on the towers, ten to a tower. With 90,000 watts projected upon the playing field we were able to distribute an intensity of 14 foot candles over the playing area.

The height of the towers plus the elevation of the ground plays the floodlights 127 feet above the playing field, thereby eliminating glare. This has proved so satisfactory that we play our night football games with a regulation tan football. Furthermore, we hold no night practices.

Night football is now going through the criticism that the automobile received when it became evident it was to supplant the horse and buggy. The fact that football was played in the beginning during the day is no argument that it should not be played at night, any more than that basketball, boxing, wrestling, billiards or bowling, all of which were originally played in sunlight, should not be played after the sun has set.

With the development of an attractive campus and well-designed buildings, football has kept pace with the general renaissance of the institution. As Xavier University's first salaried coach, I have seen the student body increase 300 per cent and the football attendance expand from 400 to 15,000 in the past ten years. This is attributed to the fact that football has been conducted on principles consistent with academic tradition.

The Physical Education Plant and Program in a High School of 2,000 Students

By W. L. Childs

Head of the Department of Physical Education
New Trier High School, Winnetka, Ill.

The Physical Education Plant

PLANNING a physical education plant so as to give a maximum of usefulness with ease of control and adaptability for many purposes is a problem most schools have to face at some time.

New Trier has been fortunate in being able to solve this problem very satisfactorily. The physical education plant at New Trier includes two athletic fields totaling sixteen and one-half acres, eight marble dust tennis courts, a very unusual gymnasium building, and a separate natatorium soon to be replaced by another which will be an integral part of the main building. The athletic field contains a half-mile cinder track with 220-yard

straightaway, and has been very carefully planned for both interscholastic and intramural sports. As many as eleven football, soccer, speedball, and similar games may be played at the same time.

The gymnasium building has attracted considerable attention and merits a somewhat detailed description. The basement floor contains a field house, laundry and rifle range. The dimensions of the field house are 223 feet by 130 feet by 12 feet in height, and the floor is a mixture of cinders and clay. The field house contains an eleven-lap running track, a 50-yard straightaway with eleven lanes, and is equipped with jumping pits, shot put circle, baseball batting cage, golf driving net, etc. Towels, bathing suits, and school uniforms are

washed in the laundry.

Five separate gymnasiums and two combination handball and squash courts are located on the floor above the field house. These five gymnasium rooms vary considerably in size. The smallest is used for corrective and individual exercise only and is 40 feet by 20 feet in size. Each of the other four is equipped with balconies for spectators. The floor dimensions of these are 42 feet by 60 feet, 30 feet by 60 feet, 60 feet by 90 feet, and 90 feet by 135 feet.

The two largest gymnasiums are separated by folding doors and are so arranged that they may be used together as an auditorium for large gatherings, the larger one being used for seating purposes, the smaller one serving as a stage. Balconies with

built-in seats and seating capacity for 1500 people surround three sides of the main gymnasium. Twenty-five hundred chairs may be placed on the main floor, giving a total seating capacity of 4000 when used as an auditorium.

The space under each of the side balconies contains a hallway, a lecture room, five offices, a small shower and dressing room and storage space for 1300 chairs and apparatus. The space under the end balcony contains two trophy rooms, two check rooms, and a large lobby equipped with ticket booths. The entrance and main exit for the audience is through the lobby. Ample exits are provided on both sides and at both ends. There are lavatories for men and women on both the main and the gallery floors. There are several conveniently located drinking fountains and six recessed, flushing cuspidors are installed in the walls surrounding the playing floor.

Seven games of basketball or volley ball may be played at the same time, three on the main floor, two on the stage floor, and two in the other gymnasiums. For match games, special knock-down bleachers were constructed which run from the balcony wall on three sides to within a few feet of the main court. Thirty-six hundred people may be accommodated at basketball games on the bleachers and in the balconies. By using bleachers across the stage the capacity may be raised to 5000.

A great deal of study was given to the arrangement of corridors, stairways, and locker rooms. The locker room system permits very rapid handling of large groups. Rooms, corridors and stairways have been so designed as to give a logical arrangement for the various purposes for which the building is used, and a maximum of easy control and elasticity for such use. The rooms are well planned for various physical education purposes.

We have no gymnasium that is definitely a girls' or a boys' gymnasium. Every part of the building is easily available to either girls or boys. Just what parts of the building girls or boys may use is determined by the school policy, which may be changed at any time. This arrangement makes for a continuous and efficient use of the building. The program is so planned that when the girls' activities require less than their share of the available facilities, these facilities are used by the boys, and vice versa.

The boys have two large shower rooms. One of these is so arranged that it may be entered only from the main locker room during school hours, and only from the team locker rooms

after school hours. These showers are used every period during the day by the gymnasium classes, and are private team showers after school. This shower room also may be closed off entirely from the boys and used as an extension of the girls' shower room (access being through the steel door which separates the two), or in case of a big athletic event when the girls' showers are not in use, the girls' shower room may be made available to the boys.

Students enter the building through ground level corridors. The boys' corridor is on one side of the building, the girls' on the other. These corridors pass the locker room entrances and continue on to the instructors' offices which are some distance beyond. This has proved an excellent arrangement, as instructors when in their offices are easily available at all times, and yet are far enough away so that they are not continually interrupted in their work by students on matters of no importance.

Doors from the locker rooms lead to stairways; doors from landings on these stairways lead to all gymnasiums. By merely locking and unlocking doors on these landings, the following situation may be secured. There will be two places only where a student can go—to an instructor's office, or to the lobby of the locker room. The locker room entrance is closed by wire gates. The locker room attendant may admit the student to the locker room by pushing an electric button. When the student is properly attired for gymnasium work, another button will admit him to a stairway. From landings on this stairway he may enter any part of the building. To bar him from any part of the building, it is only necessary to lock a door on one of these landings.

The locker rooms were planned to speed up the details of dressing, bathing, etc. A special adaptation of the Kansas City locker system was worked out for this building. The baskets are kept in a wire screen cage in the center of the locker room. Through the center of this cage there is a passageway with basket aisles on each side. There are corresponding locker aisles directly opposite these basket aisles. At the end of each basket aisle is a gate.

When a gymnasium class is due, all these gates are open. The class walks right through the cage, each boy taking his basket and entering the locker aisle directly opposite his basket aisle. As soon as the class has passed through the cage, which requires only about a minute and a half for a class of eighty, the attendant locks the cage gate.

Each locker aisle is a separate room and may be closed by a gate. No locker keys are given out, but the gates are locked by an attendant as soon as the boys are out, and are opened again at the close of each class. After school, baskets and keys may be given out as in the regular Kansas City scheme. All lockers may be locked either by key or padlock. A special locker was designed with a small basket compartment having its own separate door above the main locker. Boys who report after school every day may keep their baskets locked in these small basket lockers, transferring the padlock to the locker beneath when exercising in the gymnasium. Practically the same system is used by the girls. They, however, are provided with individual showers and individual dressing rooms.

There is a special locker room for team men. Boys wearing spiked or cleated shoes pass directly to the dirt floor field house, or through it to the athletic field. The training room lockers are of a special design. They are two feet in depth and one foot wide, allowing room for clothing to be so hung up that it will dry properly. These lockers have perforated floors and perforated tops. Six heating pipes pass through the base of the lockers, and a fan system draws the hot air out at the top. They are very satisfactory. The forced ventilation system serves all locker and toilet rooms and other parts of the building.

There is a training room equipped with first aid outfit, therapeutic light, baker, rubbing tables, etc., and ample provision has been made for janitors' closets, and rooms for equipment and storage.

Three well furnished club rooms are among the delightful and unusual features of this unique physical education plant. These club rooms are used by students and faculty and are centers of social life in the school.

The swimmers' entrance to the new natatorium (soon to be built) will be through the shower rooms of the present gymnasium. This natatorium will have several unique features. The pool proper is to be 60 feet by 75 feet. It will be surrounded on three sides by a built-in grandstand which will accommodate 1500 spectators. An electrically controlled aluminum partition will divide the entire room into two separate natatoriums, each with a large seating capacity. Each pool will be 75 feet by 30 feet. One pool will be used for girls and one for boys, but for swimming meets and exhibitions the partition will be raised and the two pools used together as one large natatorium.

The Physical Education Program

WITHOUT making any pretense that this is an ideal program I shall try to present an outline of the physical education organization and program at New Trier High School, a senior four year high school with an enrollment of 1904.

The Boys' Department Staff

Department Head

Two Assistants

Half-Time Secretary and Stenographer

Working in conjunction with this department are seven men who teach academic subjects and coach interscholastic athletics during certain sport seasons, and nine other men who teach academic subjects and assist with intramural football.

The Girls' Department Staff

Department Head

Three Assistants

Secretary

Half-Time Stenographer

(There is a locker room attendant for each department.)

The Health Department

The Health Department is separate from the Department of Physical Education, but the work of these two departments overlaps and dovetails to such an extent that it should be mentioned here. The permanent staff of the Health Department consists of the department head and one assistant. Both are nurses of experience and ability. They cooperate with the school physician (who is the Health Commissioner of Winnetka) and with the Departments of Physical Education in matters pertaining to the health of the school. A group of "Service Girls" (high school students) assist in the detail work of the Department.

Some instruction in hygiene is given in the gymnasium classes by the physical directors, but the regular courses in physiology and hygiene are taught by members of the Health Department. Boys and girls unable to take physical education work on account of illness or injury are excused from gymnasium classes and assigned to study hall by the Health Department.

Physical Examinations and Health Items

At the beginning of the school year physical examinations are required of every member of the school, including students, faculty and janitors. These are given during the first week of school by a corps of physicians. The school physician is in charge, and is assisted by five men and five women

physicians. (Parents who prefer to have their children take this examination from the family doctor are given this privilege.)

The purpose of this examination is to safeguard the student from that type of exercise for which he may not be physically fitted, and to discover any incipient pathological conditions that might prevent him from doing his school work. We do not attempt to prescribe either through a physician or otherwise except in matters that are preventive in nature and have to do with the general sanitation and control of the health of the school. Defects are reported to parents with a recommendation from the school physician. Cases which need following up are in charge of the Health Department.

Students are classified for physical education purposes into three groups by the examining physician: A. Those who can do anything. B. Those who can do restricted work. C. Those who cannot take work in the Physical Education Department. Restrictions may be removed on recommendation by the family physician. Boys in the restricted group are re-examined two weeks after the first examination, and further examinations are given when deemed advisable.

The Physical Education Department carries on a continual campaign to eradicate ringworm of the feet. First aid treatment is given both by the Health Department and by members of the Physical Education Department. A doctor is present daily during football practice and attends all football games to render first aid, protect injuries and help keep the players in good condition.

In case of serious injury or illness, the procedure followed is to render first aid, notify the school office, telephone the parents, and arrange to get the family physician, or some other physician agreed upon by the parents, in touch with the boy either at the school, the home or the hospital.

Before team equipment is issued to a boy for any sport, he must present a parents' consent card filled out and signed by the parent.

Long schedules are taboo, and a rest period is required between sports for boys who participate in more than one sport season. Coaches, teachers and advisers are constantly on the alert for signs of overwork, lack of sleep, illness and under-par conditions.

The water in the natatorium receives chlorine treatment, the bottom of the pool is vacuum cleaned and the top of the water flushed off daily. We use a commercial test system and keep the chlorine content between 0.2 and 0.5 parts of a million.

The water is continually recirculated through a filtration plant, the entire content of the pool passing through the filter every ten hours. About 3500 gallons of fresh water are added daily. A bacterial count is made twice a week by the Health Department of Winnetka. Thorough soap baths are required before entering the pool, and all students with open sores, infections or colds are barred from its use. No suits are worn by the boys.

The main objective of the Physical Education Department is health.

Physical Education classes meet out-of-doors when the weather permits. We are compelled to work indoors during about five months of the year. We think boys should have a knowledge of the great team games, and the opportunity to benefit by the character and social values that they develop, and that they should also become adept in sports with the greatest carry-over values, such as tennis, swimming, golf, etc.

The schedule of activities in the Physical Education Department will be considered under three headings in the order of their importance as we see it.

1. The physical education classes.
2. Intramural athletics.
3. Interscholastic athletics.

The Physical Education Classes

Two 40-minute periods per week of physical education work are required of all students throughout the four years of their high school course unless excused on account of physical disability. The first 6 minutes of this 40-minute period is allotted to dressing, 1 to 2 minutes for calling the roll and class organization, 24 to 25 minutes of actual class work, and the last 8 minutes for shower and dressing. A special gymnasium uniform is used in all classes, and pupils are required to take a shower after each class. Towels are furnished and laundered by the school free of charge.

One credit per year is given for physical education (85 credits required for graduation). Members of interscholastic squads are excused from the work of the regular gymnasium classes during their sport season, and receive physical education credit for the after-school training.

Swimming is taught to all boys except those excused for some physical disability. Special classes are run for non-swimmers during the fall semester.

Boys' Gymnasium Class Activities

Except for a six-weeks period each year which is devoted entirely to formal gymnastics, the work of the physical education classes is largely

of a recreative type. During these six weeks, a part of each class period is used for calisthenic work, stressing exercises for posture. The remainder of the period is devoted to tumbling and fast work on the apparatus, such as spring board work and vaulting over horses with and without spring boards.

The gymnasium class schedule is so coordinated with the intramural work that (with one or two exceptions) the intramural schedule in any sport is preceded by a period of training and competition in that sport during the gymnasium classes. Football is an exception. The gymnasium classes are not equipped for football practice. The classes play touch football during the early part of the football season. A preparatory training for intramural football is given after school hours, and is required of all intramural football players.

Schedule of Gymnasium Class Activities (Boys)

- Sept. 8 to Sept. 22—Two weeks—Physical examinations, organization, volley ball.
- Sept. 22 to Nov. 17—Eight weeks—Swimming, speedball, touch football.
- Nov. 17 to Jan. 19—Seven weeks—Basketball and track.
- Jan. 19 to March 2—Six weeks—Gymnastics.
- March 2 to April 13—Five weeks—Volley ball.
- April 13 to May 11—Four weeks—Soccer and volley ball.
- May 11 to June 8—Four weeks—Playground ball and volley ball.

Intramural Sports

New Trier has been conducting an intramural sport program since 1909, and, even before that, class championships were held annually in various sports. With the increased facilities added in recent years, this program has been greatly extended. Expenses of the intramural sports are met partly through the Physical Education Department budget, but largely through receipts from games. Medals and ribbon awards are used, but the success of the program is due to good organization and a keen rivalry between the various groups.

With the single exception of football, all intramural schedules are worked out using adviser rooms as units. (Note—Adviser rooms are small groups of thirty to thirty-six pupils who meet together with the same teacher as adviser for a thirty-minute period every school day for four years.) Each adviser room enters one, two or three teams in the various sports.

Most of these tournaments are "double elimination tournaments," each team competing until twice defeated. For two or three weeks preceding the tournaments, courts and fields are assigned to the various teams for practice purposes; so that the players get considerably more play than the tournament records show. The tournaments are so arranged as to determine class as well as tournament champions.

In football, it is difficult to get a team from each adviser room; so we follow a different method of organization. About 300 boys go out for football each fall (the school furnishes all equipment except shoes). Many of these boys try out for the varsity and freshman-sophomore squads. The rest of the players are out for intramural football and receive coaching in fundamentals for the first two weeks of school. At the close of the second week, the interscholastic team squads are cut to a workable size, and all the boys in the football group not on these squads are divided into groups according to weight. Captains are elected and teams chosen by the captains. There are eighteen to twenty boys on a team. Every boy is chosen and is expected to report for practice four days each week. All boys who have a perfect attendance record for the week are privileged to play at least one quarter in each game scheduled that week. A coach is appointed for every team. As far as possible, men from the faculty are used for coaches.

The third week of school is a practice week for these teams. During this week the teams perfect their plays and play one practice game. The intramural schedule begins the following week. Round-robin tournaments are held in each weight division. Divisions having six teams play a double round-robin. Four team divisions play a triple round-robin. Each team plays one game one week and two games the following week throughout the season.

Intramural schedules for boys are run off in the following sports: Football (two weights), basketball (three weights), baseball, track, relay tournaments, volley ball, swimming, water polo (two series, fall and spring), playground ball, tennis singles (two series, fall and spring), tennis doubles (two series, fall and spring), golf (two series, fall and spring), handball singles (two series, fall and spring), handball doubles (two series, fall and spring), squash, horseshoe singles, horseshoe doubles, foul throwing, boxing, football skills.

A large percentage of our students participate in the intramural sports. The administration considers this

phase of our work of great importance and we receive excellent cooperation from the faculty. Schedules, records and announcements are kept up to date on large bulletin boards, and notices about schedules, games, sportsmanship, etc., are read to all students daily in the school bulletin (our morning newspaper) during the adviser period, which is the first period in the day.

The officiating of the intramural games is done by the Sports Club for boys and Leaders Club for girls. These are groups of students who volunteer and are trained for this service. They meet once a week to receive this training.

Free Play

Besides the regular organized classes and the intramural and interscholastic athletics, there is also a great deal of "free play." Tennis courts are used to capacity during good weather; handball courts are always busy after school; students shoot baskets, practice stunts, play catch or kick footballs whenever possible, and scrub games of playground ball are played on every available spot after school and during lunch periods. The natatorium is open daily after school for those who wish to swim.

Interscholastic Sports

The school maintains representative athletic teams and competes with other schools in the following sports: Football (two teams), basketball (three teams), baseball (two teams), indoor track (two teams), outdoor track (two teams), swimming (two teams), tennis and golf. A rifle team is also maintained by the school.

Large squads are carried in all of these sports, the policy being to give interscholastic competition to as many boys as possible.

Emblem Awards

Emblems are awarded on recommendation of the coach, the Athletic Director and the Superintendent. Teams limited by age, weight or year in school receive numerals. Unlimited teams receive the school letter. Upon graduation, all letter men receive a certificate on which is recorded the sports and years in which emblems were won. This certificate is signed by the Athletic Director, the Principal and the President of the Board of Education.

It is our policy to be quite generous in the matter of awards. Slight differences in the letters awarded indicate, to those who know, in what sport the letter was won. Distinctive letters are awarded to cheerleaders and managers. All emblem men are per-

(Continued on page 54)

Haverford College Automatic Race Timer

By Edwin A. Speakman
Haverford College

A NEW system of timing races has been designed in the Physics Research Department of Haverford College. By this system, various kinds of races, including track races, may be timed automatically to an accuracy of one-one-hundredth (0.01) second. The device is very simple in operation, being entirely automatic from the instant the starting gun is fired to the instant when the runner crosses the finish line. This means that the human element has been eliminated in timing track races. Being light in weight and fairly compact, the device is quite portable.

The novel features of this instrument will be more apparent from a consideration of present methods of timing track races with human timers and a stop watch. It is no secret among track coaches and timers that all times as usually recorded now are subject to the human reaction time of the timers. It is not generally known that this involves an error of 0.2 second. The question is now how soon can a human being start a stop watch after seeing the smoke issue from the starting gun? Psychologists have studied similar questions and agree that the time interval varies from 0.17 second to 0.22 second. Experiments carried out in the laboratory and on the track are in agreement with these values. The personal experience of coaches also demonstrates, in the case of several timers on a race, that the watches are seldom started or stopped at the same instant by all persons. It is therefore evident that

the human machine and its nervous system cannot give physical response to an optical stimulus in less than 0.17 second. This error is inherent in the human system and can not be eliminated by practice. Ordinarily, the error is 0.2 second from the instant the timer sees the smoke to the instant when the watch is started. This clearly shows the need of eliminating the reaction time of the observer. If the same error were present in stopping the watch as has been shown to be present in starting it, one error would compensate for the other. But the finish of a race is not recorded under the same conditions as the start, for the runner is seen approaching the tape, and the instant his chest touches it may therefore be anticipated. The error here is different from that at the start, and must be so, even if the timer keeps his eyes on the tape rather than on the runner. All racing times, as at present recorded, are therefore subject to uncertainties which depend upon human reaction time, and are probably from 0.1 to 0.2 second too short.

In order to time a race, it is essential to define what is meant by "the start" and "the finish." It has been assumed that the race starts the instant the *sound* of the starter's gun reaches the runner's ear. Hence this signal and no other, such as the gun flash or the first motion of the runner's foot, should be used to start the timing mechanism. The Haverford College Timer accomplishes this by having a microphone on the starting

line, as shown in the diagram, so as to receive the sound impulse at the same instant as the runner. This sound impulse must come from the gun in order to affect the microphone, so that extraneous noises will not affect the operation. This condition is attained by adjusting the sensitivity of the microphone.

The "crack" of the gun entering the microphone automatically starts an electric clock accurate to 0.008 second, which is controlled entirely by electric current, whose speed of travel approaches infinity. The clock is therefore started the instant the sound of the starting gun reaches the runner's ear.

Across the finish line of the track is directed a light beam which enters a sensitive photo-electric cell. The instant the entire light beam is intercepted the clock is automatically stopped. The runner's chest intercepts a certain amount of the light beam at the instant his chest touches the tape. The clock is therefore started automatically by the sound of the gun and stopped by the first runner to cross the finish line.

It is well to mention the fact that if "the start" and "the finish" of a race have not been defined correctly, the system could easily be changed to correspond with any condition. The position of the microphone or that of the light beam may easily be changed. If the entire body of the runner must cross the finish line, the light beam could easily be adjusted so that all the light would be intercepted at the exact instant the runner had passed the finish line.

The device can be set in operation only by the sound entering the microphone. Thus, if any person were to intercept the light beam before the race was started, nothing would result. Conversely, the clock can be stopped only by intercepting the light beam, so that sounds entering the microphone after the race is started have no effect.

Another novel feature of this instrument is the fact that a runner is unable to stop the clock by extending his arm ahead of his body and thereby intercepting the light beam. The light beam must be entirely intercepted before the clock is stopped. This can be done only by the body of the runner, since the size of the light beam is

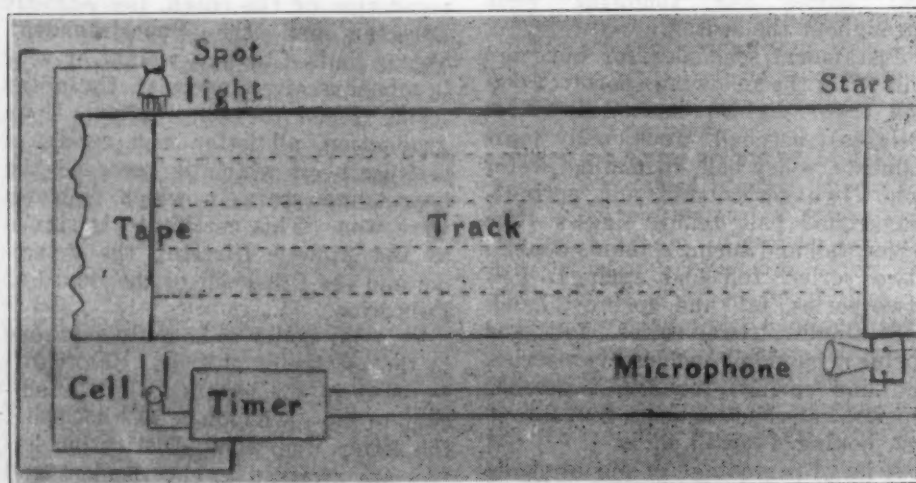
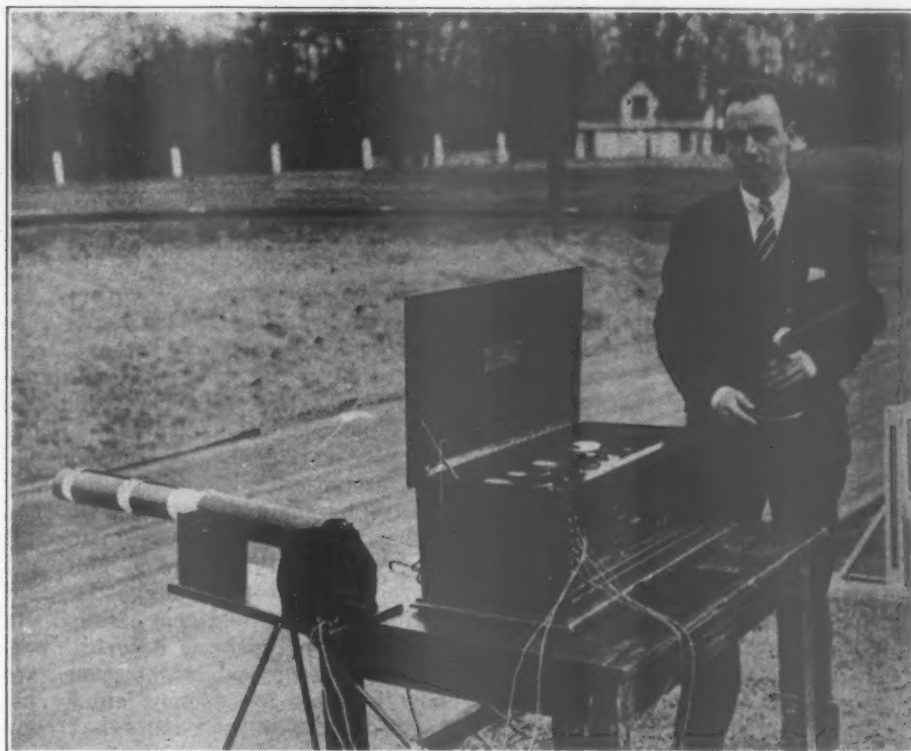


Diagram showing position of microphone



Mr. E. A. Speakman, the inventor, holding the microphone which is placed at the start. The light which throws the beam across the track into the tube in the lower left hand corner does not show in this picture

about four inches in diameter. All other timing devices which have been tried out in previous years have been subject to the error described above. This shows that a light beam rather than a tape is the desirable means of recording the finish of a race. The tape, of course, must be present to indicate the exact distance from start to finish.

In the case of short races, such as the 100-, 220-, and 440-yard races, the timer is entirely automatic. It is set in readiness merely by turning a switch which turns on the current to be supplied to the clock and amplifier. The starter shoots off the gun and the clock is started. The runners proceed along the track as the clock continues running. The first man to intercept the light beam stops the clock. During the race, no adjustments are made on the timer, so that the time recorded is entirely independent of human observation of the race. The time is indicated on the clock directly to an accuracy of 0.01 second and is recorded by a person watching the clock. To record the next race all that is necessary is to turn the clock hands back to zero. No switches or adjustments need be made to time one race after another, as in the case of heats. In other words, the device resets itself.

In the case of longer races where the runners proceed around an oval track, a switch is turned after the race is started. This makes the light beam inoperative. When the runners inter-

cept the beam on the first lap the clock is not stopped but continues running. On the last lap, when the leading runner is perhaps fifty yards from the finish, the switch is closed and the device is ready to function and stop the clock when the light beam is intercepted. In the case of short dashes, however, no such adjustment is neces-

sary. It is the 100-, 220-, and 440-yard races, therefore, to which this instrument is most applicable.

In order to have a permanent record, it is planned to mount a camera over the clock face and photograph the position of the hands, so that human observation is entirely eliminated.

It is to be noted that the discussion of reaction times applies to the runners as well as to the timers. In this case, however, the time has to do with acoustic response and not optical. The reaction time is not the same, so that the timer's reaction time could not compensate for the runner's. Whereas the optical response may be from 0.17 second to 0.22 second, the acoustic response is from 0.12 to 0.16 second. This means that it takes at least 0.12 second for the runner to cause his muscles to function after the sound of the gun has reached his ear. The fact that the instrument described records the sound the instant it reaches the runner's ear, indicates that the time recorded for the race consists of two factors: the runner's acoustic reaction time plus the time it takes him to travel the length of the track. This feature is desirable, for it increases the competition of the race. Reaction times vary from one runner to another and may be decreased by practice starting. In fact, the "set" at the start is far more neural than it is physical. Practice starting is, therefore, very important to a runner.

(Continued on page 54)



The runners about to break the light beam at the finish

A Philosophy of College Athletics

By John L. Griffith

THIS article is a continuation of "A Philosophy of College Athletics," begun in the January issue. In that number appeared discussions of *The Growth of American Sports and Athletics*, *Athletics Injuries and the Life Expectancy of Athletes*, *Conflict Between Athletics and Scholarship*, *Athletics and Education*, and *Intercollegiate Athletics and the Spectators*. In the February issue, the subjects considered were *The Commercial Aspects of Intercollegiate Athletics*, *Intercollegiate Athletics—Play, Work or Drudgery?*, *Amateur Distinctions*, and *Professional and Amateur Athletics*. The first article in this series is a continuation of *Professional and Amateur Athletics*.

Professional foot racing became so corrupt that, following the conviction of some of the members of the famous Mabray gang, our people became disgusted with all forms of professional running and, as a result, today there is practically no professional foot racing in America. Professional wrestling at the present is in disfavor in most sections of the country, and there are signs which indicate that amateur wrestling, especially in the schools and colleges, is winning a place in the field of college sports. Professional football has never gained much of a foothold and the efforts that have been made to capitalize on the reputation of a few of the outstanding college stars have not been permanently attended with success.

Professional baseball in the period in which people have spent money freely for amusements has been more than successful in the major leagues. Professional baseball, however, in the minor leagues has been for the most part unprofitable, and unorganized professional baseball is rapidly becoming a thing of the past.

There are three reasons, in addition to the one given by Mosso, why professional athletics have suffered a decline and why school and college athletics have grown in popularity. First, the officiating at professional baseball, basketball and other games has not been satisfactory; partly because the officials themselves were incompetent and more generally because, due to lack of organization, the promoters have not been able to control the players or to support the officials. This of

course is not true in major league baseball where the umpires are given the finest support possible by the officers of the leagues. Second, there is a lack of permanency in the organizations that have promoted professional sports. With the exception of big league baseball and a few of the best known prize fighters and the managers and wrestlers who comprise the two wrestling trusts, professional athletic promoters have lost money in attempting to stage professional bouts, games and tournaments, and it has been conclusively demonstrated that it is impossible from a financial standpoint to pay all of the boys who want to play baseball. Third, very often the men who have sponsored professional sports enterprises have failed to win the support of the better class of people in the several towns and villages. Consequently, the games have lost standing in the social scale of sports.

During the period in which the professional promoters were attempting to entertain the American people with professional athletics, the schools and colleges were gradually developing amateur sports for and by the undergraduates. After the students had started athletics in the schools and colleges, as previously mentioned, the educational authorities assumed the responsibility for the conduct of such activities. Even though in many cases athletic control by the school and college heads was only nominal, yet, taken by and large, men of standing in the communities were interested in seeing that inter-institutional athletics were conducted on a high plane. As a result, our people generally have confidence in the kind of athletics that are being conducted by the educational institutions. Further, the schools and colleges are for the most part permanent in character. In some of the older universities, athletics have been conducted without interruption (except during war times) for seventy-five years or more, and it is reasonable to believe that the educational institutions will be sponsoring athletics for years to come. The permanency of character, then, of these educational institutions that are conducting athletic sports has added to the prestige and popularity of school and college athletics.

Today the citizens, in the small towns especially, have transferred their interest of former days in professional sports to the games that are

managed and controlled by the high school and college authorities. In the larger cities, the athletic clubs have one after the other given up their inter-club competitive teams; the A. A. U. meets are of secondary importance to the conference and other meets sponsored by the colleges; and the unorganized professional baseball is being superseded by playground ball and by the American Legion Junior Baseball activities. There will probably always be some professional football and basketball and a certain amount of professional tennis and golf, and there is no reason for suggesting that major league professional baseball will lose its appeal with the American people. Amateur sports, however, are now in their ascendancy, chiefly because of the impetus that has been given them by the schools and colleges.

Some profess to believe that a return to the old situation, where townspeople paid little or no attention to high school and college athletics and spent their money for professional sports amusements, is more desirable than the present situation, where our people quite generally are very much interested in the athletics offered by the educational institutions. Looking at this matter from the standpoint of the future of athletics and the good of individual sports, certain it is that there are more prospects of the perpetuity of the different games under the present management and auspices than was to be expected under the management of the professional promoters. Viewing this matter from still another standpoint, it is undoubtedly well that our sports ideals are at the present time being shaped by school and college men and by amateur athletes rather than by those who have engaged in athletics for monetary reasons. The attitudes of the adult spectators of today were largely determined in the professional regime of other days. There is every reason to hope that the attitudes of the spectators toward athletics ten years from now will be different, since their attitudes are being influenced in large measure by the example of the amateurs.

Summary. The American people have tried to administer athletics on a professional basis and for a number of reasons are abandoning the plan.

Those who formerly were interested in supporting professional sports events have in large numbers transferred their allegiance to school and college athletics.



WHAT HAS AERODYNAMICS TO DO WITH FOOTBALL?

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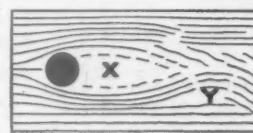


DIAGRAM NO. 1

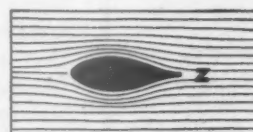


DIAGRAM NO. 2



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Carl L. Lundgren, Director
Room 104, Men's New Gymnasium
Champaign, Illinois

The A. A. U., minus a paid administrative and coaching personnel and lacking athletic grounds and buildings, is no longer able to attract the college athletes to its meets and tournaments as formerly. The colleges are now providing their athletes with attractive schedules, and the help of outside agencies is no longer needed.

With the exception of ten or twelve of the old established athletic clubs that have had a permanent athletic history, the clubs that come in this category have given up their interclub teams.

The bulk of the nation's amateur athletics, aside from golf and possibly tennis, is now supported by the educational institutions primarily, and by other amateur organizations such as the playgrounds, the American Legion, the Y. M. C. A. and other similar philanthropic groups.

This is the age of amateur athletics in the United States. Amateur athletics will continue to grow if the educational institutions supervise them wisely and assume a friendly rather than hostile attitude toward them, and if college presidents do not become embittered toward the game of football because of the unusual annoyance that accompanies their stewardship of the sport.

The Competitive Spirit and Championships

BEFORE the coming of Christ, the Jewish people, tired of war and strife and longing for peace and ease, looked forward to the advent of the "Prince of Peace" believing that He would put an end to competition and that thereafter they would be "transported to the skies on flowery beds of ease." Christ, however, surprised his people by proclaiming that he came not to bring peace but a sword. From that time to this, men have longed for a surcease from toil and strife and have looked for some plan that would guarantee the slothful or incompetent the same rewards won by the industrious and intelligent.

If a man lived alone in the forest or on an island, he would not compete with other humans but he would find himself in competition with the elements and with the animals that inhabited the forest with him. If he were forced to catch fish for food he would daily match his skill, strength and cunning against that of the water inhabitants. Such a man would not philosophize concerning competition because his life would depend on whether he could win the champion-

ship in his struggle with the forces and wild life of nature or whether he would succumb.

The colonists in the East, the men who blazed the trails into the West, as well as all those who as pioneers fought for existence in the sections where they settled, had the competitive spirit. The champions lived and the losers died. These men did not write treatises on the equality of man both because they were too busy to philosophize and because every day they saw proof of the fact that men were not equal in strength, health, intelligence, ambition and energy.

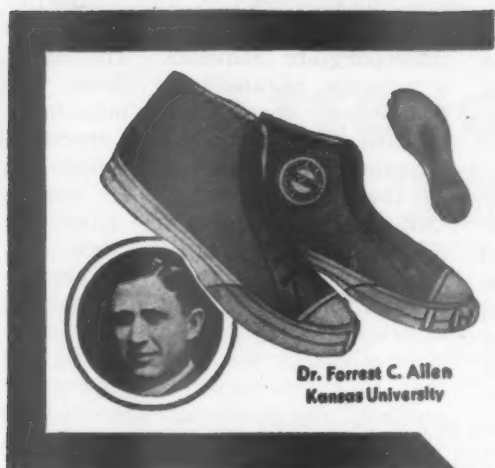
In these days when our work is largely done with waterpower, electricity and machinery, our competitions have become of a new sort. The competitive spirit still lives, and those who possess it survive and those who are non-competitors perish. True, a man with but little competitive spirit may exist, but he does not live abundantly.

With the crowding together of many people and with the advancements of civilization, rules governing competition have become necessary. The law of the jungle is the law of the survival of the fittest. When man fought with the wild animals or against the Indians no quarter was asked for nor given. Civilized society recognizes certain rights as due the weak and infirm. In a democracy, there is constant war between those who would place limits on success and consider only the advantage of individuals of mediocre and subnormal attainments and those who would exalt the idea of the aristocracy of learning, the aristocracy of business success, the aristocracy of social birth and manners and the aristocracy of achievement of whatever kind. The American experiment will succeed only if the American people continue to make it possible for those of subnormal capacities to become mediocre and to give mediocrity an opportunity to rise above mediocrity without handicapping those of superior capacities.

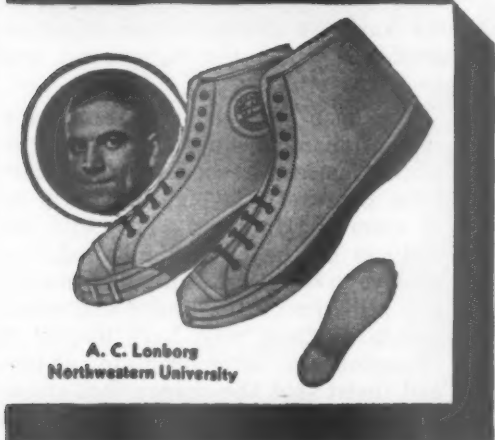
The law of competition operates continually in business, but business has certain rules regulating the manner in which competition may be carried on. Since the World War, a large number of trades and industries have adopted competitive standards, and the member of any trade or industry who does not compete for business according to the rules adopted is punished by the Federal Trade Commission or by the trade associations.

The students in school and college, from the time they enter the grade

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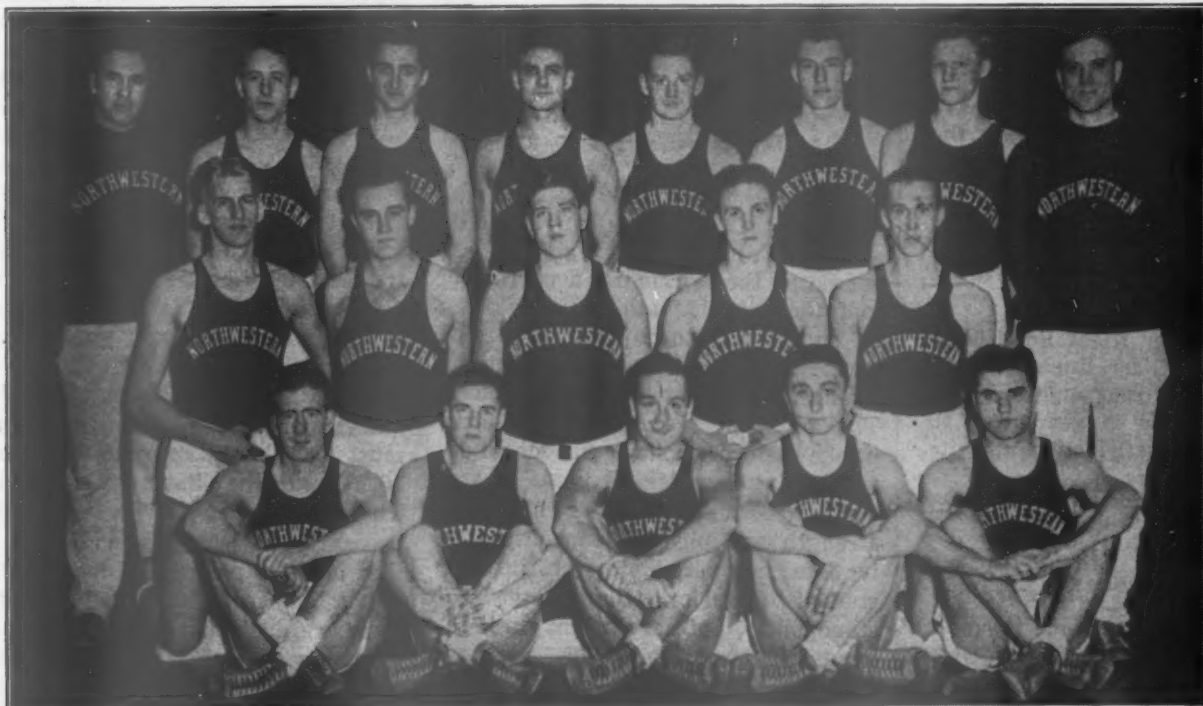
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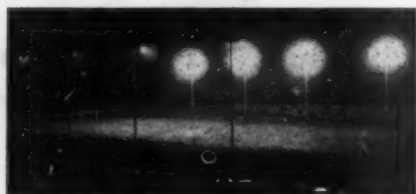


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school until they are graduated from college, are involved in a highly competitive system which educational institutions impose. The child in the elementary school competes with the other children for the honor of being selected as a monitor or as a safety guard to direct traffic. In high school, he competes for the distinction of being an honor student and in college he first competes for the privilege of being allowed to stay in college and later for credits and scholastic honors.

In college circles, we have a good illustration of the application of the law of the survival of the fittest. In the first place, in many of the colleges only students who were ranked in the upper half or third of their high school classes are accepted as freshmen. In others, students are admitted on competitive examination. Each year an appalling number of students are dropped from college because they have failed in the scholastic grade competitions. The weeding-out process continues from the grades through college, and those who remain in college and who stand out above their fellows are awarded scholarships, fellowships, commencement honors and the Phi Beta Kappa key. Further, the superior students are urged to work for master's and doctor's degrees, and the honor students receive the highest recommendations from the faculty when seeking employment upon graduation.

The majority of physical education departments make provision for the care of those students who are sub-normal in health and physical attainments in the orthopedic classes; the interests of the boys of mediocre strength and athletic ability are served by the intramural department; and the superior athletes are given an opportunity to enjoy the types of competition fitted to them in interscholastic and intercollegiate games. The physical education department, unlike the other college and school departments, classifies all types of students according to their health, strength and physical capacities but it does not eliminate the inferior student (inferior from a physical standpoint), but serves him throughout his undergraduate days.

There are two common ideas of, and attitudes toward, the question of championships today in educational circles. First, there are those who would make it impossible for an athlete to win a championship beyond the college walls. Class, fraternity or intramural contests designed to determine college championships in athletics are accepted as desirable by the

men who constitute the first group. These men would do away with inter-institutional debates and oratorical contests as well as interscholastic or intercollegiate athletics. The usual arguments advanced by those who hold these views are that inter-institutional athletics are highly spectacular, and, consequently, are publicized by the newspapers with the results that large crowds of people attend the games. Thus, according to these men, the cause of education suffers an eclipse. Further, it is claimed that the athletes are injured physically, that their scholastic work deteriorates, and that they are spoiled by newspaper publicity and public adulation. It is also suggested that if so much time were not expended on the training of the superior athletes more attention would be given the sub-normal and mediocre athletes.

The men who hold the contrary view of championships suggest that it is un-American to condemn any enterprise because it is big, successful or of absorbing interest. They cite the findings of the Carnegie Foundation relative to the effect of highly competitive athletics on the health and scholarship of those who have played in championship intercollegiate games, and insist that the charge that strenuous competition injures the athletes physically or affects their scholastic work remains unproved. The average coach, it is pointed out, can be depended upon to see that the star athletes do not get an inflated opinion of their athletic ability or importance.

In order to guarantee a proper balance, college conferences have placed a limit on the number of games that may be played by conference members. In the early days of the Intercollegiate (Big Ten) Conference, as many as seventeen football games were played by a single institution in one season. Today, the limit is eight games per season, and these games must be played between September 15th and the Saturday preceding Thanksgiving day. These are wise precautions, because it has been found that athletes playing a limited schedule of games in a limited period of time are enabled to carry their academic work satisfactorily, and that athletic training carried beyond a reasonable limit partakes of the nature of drudgery for the men in training. There should be no objection to championships provided they can be determined without a prolongation of the season's training.

College athletes, now that they are being given ample opportunities for meeting others of like ability and

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Jess Hawley, formerly of Dartmouth
Duke Dunne, Harvard Line Coach

BASKETBALL—Arthur Lonborg, Northwestern

TRACK—Frank Hill, Northwestern

SWIMMING—Tom Robinson, Northwestern

ADMINISTRATION—K. L. Wilson, Northwest'n



BOB ZUPPKE
Illinois

Supplementing the work of these two coaches will be talks by Arnold Horween, Harvard; Judge Walter Steffen, Carnegie Tech; Jess Hawley, formerly of Dartmouth, and Duke Dunne, Harvard line coach. These men will speak on their various contributions to the game.

Dutch Lonborg who just completed his fourth year at Northwestern by winning the Big Ten basketball championship will give the basketball course, covering in detail fundamentals, team play and offense and defense.

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training on the athletic fields, are not so eager as formerly to play professional baseball in the summer time, to run in A.A.U. meets and to engage in other than college contests during their undergraduate days. Further, our athletes as a class after graduation lay aside their running shoes, their football suits and their baseball gloves, and devote themselves to the work they have prepared themselves to do. Golf, tennis, squash, handball, swimming, hiking, hunting and fishing are the favorite sports of the graduates. If their college, however, had not during their undergraduate days given them an opportunity to play the team games as representatives of their colleges, undoubtedly they would have played on local professional teams.

At the University of Illinois, boxing is an intramural and not an intercollegiate sport. Consequently the contestants in the boxing shows conducted by professional promoters in Champaign last year were for the most part college students. Whether boxing should be conducted as an intercollegiate sport or not, here is an illustration of what would happen if intercollegiate sport were made unattractive to the athletes. While a few would have all of the highly organized athletics for the superior athletes conducted by the professional sports promoters, the majority of fathers and mothers of college athletes, it is safe to suggest, would prefer that their sons engage in athletics under the direction of college authorities and that they receive their training under college coaches.

Summary. The stifling of the spirit of competition is un-American and not in accord with accepted principles of education. Instead of frowning on competition and championships, we are beginning to stress more and more the ways in which the games shall be competed. The interests of the superior athletes should be considered as well as the interests of those of inferior or mediocre ability. Certain limitations of the schedule and length of the playing season are necessary in the interests of a balanced educational program.

College Coaches

"**I**N an ideal university there would be no professional coaches." These are the words of Dr. Howard Savage as published in Bulletin 23 of the Carnegie report on athletics. Those who hold the same opinion must either feel that college athletics are not educative or they would carry this principle further and do away with

all professional teaching in the languages, sciences, mathematics, history and literature in the colleges. In an earlier article, an attempt was made to show that under the old idea of formal education and formal discipline in education, athletics might well have been considered as having no place in the educational scheme. If the more modern idea, which has been expressed by Dr. John Dewey and other leaders of modern educational thought and which has been quite generally accepted by the schools and colleges of this country, is sound, then it may be assumed that athletics if properly conducted are educative and consequently should be considered as an educational activity. It hardly seems necessary to qualify the preceding statement by the words "if properly conducted" because when we speak of the objectives of Latin, history or chemistry we assume that these subjects are properly taught. Of course, we know that some instruction given in the academic subjects is of little or no value and that some athletic instruction likewise is of no account. As the educational world, however, is constantly striving to improve the quality of instruction, so the quality of athletic coaching is likewise receiving the serious consideration of educators.

If college athletes are educable and if athletics have any part to play in the education of our people, then trained instructors are necessary in the field of athletics just as trained instructors are needed in other educational fields. The truth of this statement will appeal to everyone with the possible exception of the man who may believe that college professors and high school teachers should give their time gratis to the instruction of youth. There was a time when ministers were not paid fixed salaries for their time and work. Today, almost universally we are agreed that the laborer is worthy of his hire, and consequently ministers, social workers and educators are paid what amounts to a living wage. It is unfortunately true that society does not make recompense to such men commensurate to their worth to society. However, there is no immediate prospect that we may expect amateur preaching and amateur teaching in the churches and colleges of America.

As regards the pedagogy of coaching, Professor H. W. Davis, head of the English Department of Kansas State Agricultural College, has recently been quoted as advancing the following opinion. He said, "I have a notion that the best teaching in America is done on football practice



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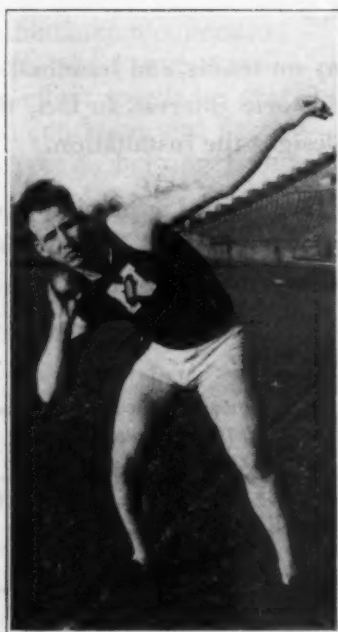
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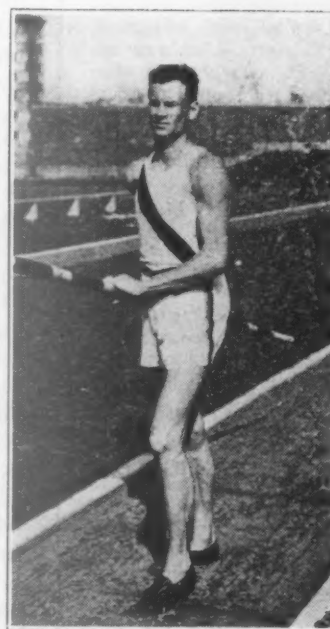
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fields. For thoroughness, effectiveness in results, and concentration in the pursuit of objectives the training given on the gridiron surpasses that of any classroom in which I have ever been incarcerated."

A successful coach must be a good instructor because the quality of his teaching is easily judged. If he is a good instructor he may stay in the game for a number of years. If he is not a good teacher he is soon eliminated, and seeks other occupation and work. The same law of the survival of the fittest is not applied so inexorably in the case of other teachers. A man may be a mediocre instructor in English, philosophy or history and hold his position indefinitely. In fact, the tendency of today is along the lines of attempting to guarantee the perpetuity of the professional life of a college instructor. While some may complain because of the high mortality among football coaches so far as their tenure of office is concerned and while much may be said against the unreasonableness of the public generally in its attitude towards the losing coach, yet the fact remains, that generally speaking, the good athletic instructor survives and the poor instructor perishes. This means, then, that athletic coaching from the standpoint of pedagogy will stand the technical educational tests which may be applied to it.

Along the lines of modern thought in education some are contending that the educational experience of the young athletes would be enhanced if they were left more to their own devices; in other words, if they received less coaching. In the last analysis, our athletic methods should be judged in terms of the good or bad effects that these methods have on the lives of those most immediately concerned; namely, the athletes themselves. There are two ways, however, of looking at this matter. First, experience has shown that unorganized and unsupervised play on the playgrounds is not so pregnant of beneficent results as organized play. Where children organize and administer their own play activities, the bully usually dominates the group, and his standards of morals and sportsmanship become the standards of the others. Certainly some degree of supervision, instruction and administration is necessary if athletics are to be considered as educational in content.

In the second place, many a coach has found to his sorrow that his teams have played losing football because they were over-coached. When new situations arise in the game, and new situations are constantly arising in the

game, the coach cannot tell the players what to do with the ball or how to advance it down the field. If, however, he has successfully taught the rudiments of the game and has suggested right principles and has encouraged the players to develop initiative and to rely on their own judgment, his team, other things being equal, will win the contests. The best coaches do not attempt to run the team from the bench, not only because side line coaching is contrary to the rules but because side line coaching does not pay. This being true, there is not so much danger that the coaches will kill individual initiative on the part of the players as many believe.

The suggestion that the coaches should not be allowed to make substitutions during the game and meet with the players between halves would not result in placing the responsibility of making decisions in the game on the part of the whole group. The responsibility rather would be taken away from the coach and given to the captain or the dominant leader of the team. While there would be some educational value in this practice so far as the captains were concerned, a comparatively small number of athletes would be affected. Further, there may be some question relative to the advisability of placing so much responsibility on the shoulders of the team leaders.

It is not sound from the standpoint of administration to remove the coach from the game on the grounds that if he is not allowed to sit on the sidelines he will not have an opportunity of violating the rules by coaching from the sidelines. If a coach cannot be trusted to observe the rules of the game he should be relieved of his position and not merely removed from the field. Since so much depends upon the character of the athletic instructor, every attempt should be made to employ only men of ideals to conduct play activities of school and college students. If bad practices have been followed in the athletic department of any school or college, those who were responsible for the selection of the athletic director or coach should be blamed. It is a mistake to credit the fault to athletics, because the evils after all are not necessarily inherent in the athletic system, and, further, it is a mistake to try to make the coach good by legislation.

In the early days of athletics, men with no technical training and often men with no educational background were employed to coach the athletic teams. Today the majority of college coaches are men who hold degrees

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from reputable colleges and universities, and more and more men who have been graduated from teachers' training courses are being employed as athletic coaches. Since the World War a number of universities have established teachers' training courses or coaching schools under the auspices of the colleges of education. Graduates of these departments are required to pass a maximum number of hours in so-called cultural courses and science and pedagogy, in addition to a minimum amount of work in the technique of coaching and athletic administration. As a result of this new development, it is reasonable to expect a higher quality of coaching in the future than the colleges have had in their athletic departments in the past.

Summary. If athletics are educational and if they may reasonably be expected to approximate some of the objectives as outlined by the National Education Association and the North Central Association of Secondary Schools and Colleges and other standardizing groups, then the employment of professional athletic instructors is not incompatible with educational aims.

Athletic coaching is governed by certain laws that do not apply in the same degree to instruction in other educational fields and these laws operate against over-coaching, the stifling of initiative on the part of players and too much interference with the players during the progress of the games.

The quality of athletic coaching is being improved both as to technique and character through the agency of teachers' training courses operated by schools of education.

The Alumni and College Athletics

COLLEGE undergraduate attendance has increased from 184,182 in 1911 to 595,458 in 1925. In 1900, approximately 3 per cent of the persons of college age attended institutions of higher learning, while, in 1928, 18 per cent of those who fall in this age group attended college. President Hoover is authority for the statement that "today we have more of our youth in institutions of higher learning than all the rest of the 1,500,000,000 people of the world put together."

The greatest increase has been noticeable since the World War. The man whose attention has been attracted by the unprecedented attendance of students in some of the larger universities and by the fact that some of the older colleges have placed limits on the number of matriculants who

will be permitted to enroll in their respective institutions may at the same time fail to realize that many colleges today employ full time field agents to solicit high school graduates to register in the colleges in question, and, further, he may forget that forty years ago practically every college and university in the United States was forced to advertise for and solicit prospective students. The college president of other days, as well as the present day college president who has been confronted with the problem of securing students to be taught (students whose tuition payments helped in part at least to pay the salaries of those who taught and likewise to contribute to the upkeep of the institution), has always depended upon the alumni to help out in this situation.

It is reasonable to believe that an alumnus living in a certain town will know some of the members of the high school graduating class, and, if the alumnus has attained a satisfactory social and business rating in his community, the college will quite naturally not only point to him as an example of the quality of the products of the college but will expect this alumnus to express his loyalty to his Alma Mater in terms of more students.

College presidents have always realized that money does not grow on trees, and the task of raising enough money for buildings, equipment, salaries and endowment has been an arduous one. Many a wealthy man who was not qualified to pass intelligent judgment on technical educational matters has been elected to serve as a member of the board of trustees in the hope that he will become interested in the college and contribute to its support. Financial secretaries, whose chief duties are those of raising money for the college, are frequently employed when the college needs money (the college always needs more money), and the president, the financial secretary and the trustees quite naturally appeal to the alumni for financial support.

In the state university, where the running expenses of the educational plant are paid from tax rather than endowment funds, the alumni are frequently asked to assist in the work of pointing out to the state legislators, who live in the home towns of the alumni in question, the financial needs of the university. If a member of a state legislature is not friendly toward the state university, the alumni living in that legislator's home town or district may on election day attempt to elect some man who will

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vote favorably when the university budget is before the legislature.

In the early days, when the athletes ran their own athletics and when the college authorities did not give constructive aid and assistance, the men who played on the various teams assumed a proprietary interest in the different sports. They often persuaded promising athletes to enroll in the academy which was a preparatory school adjunct of the college, or, perchance, to enroll in the college proper. When these athletes graduated, they did not lose interest in their college teams, but frequently manifested their interest and loyalty by recruiting other athletes for the "old school." As the alumni grew more numerous and prosperous, competitive bidding between alumni of rival institutions resulted.

It is not intended at this time to deal with the question of the recruiting and subsidizing of athletes; the preceding paragraphs have been written to show that in the earlier days, at least, the alumni were not considered as pestiferous individuals of low ideals who were continually meddling with college and university matters. The fact is they were almost constantly being reminded of their obligations to their college and were urged to assist financially and by sending new students to be taught by the same professors who had previously instructed the undergraduates who had now become alumni.

A change has taken place in the American colleges in the last decade, however, and now, in the case of some of the larger universities at least, the question is not that of attracting students to the campus but of being able to serve properly those who have come of their own volition without advertising or solicitation on the part of these institutions. Further, a number of the older colleges and endowed universities have been made the beneficiaries in the wills of men who have amassed huge fortunes in the days of American prosperity, and, consequently, the individual alumni are not so frequently urged to contribute to the support of their colleges as was formerly the case. The state universities likewise are today being given more generous treatment at the hands of the legislatures than was formerly true. The alumni still are, however, and always will be a vital part of the institutions that graduated them. What the writer is attempting to say is that the alumni are now being blamed by some people for doing that which formerly they were commended by the college for doing. It will be well if we keep in

mind this thought: viz., that what is now looked upon as alumni interference was formerly not looked upon as interference at all and that time enough has not yet elapsed to perfect the readjustment that the changes in the educational world demand.

If the college, further, is to claim credit for the success that her alumni have achieved, then it is only fair that the college likewise receive some discredit for alumni failures. If, for instance, an alumnus who has sat at the feet of his professors for four years does not in that time learn to appreciate the finer things that are to be found in the life of the spirit, and, consequently, does not after graduation manifest a lively interest in the intellectual life of the college but does exhibit a tremendous interest in the college football team, is the character of his teaching or football to receive the blame? This and another question (viz., if somehow or other the alumni could be persuaded to place less emphasis on college football, would they necessarily then place more emphasis on the work of the academic departments?) demand serious and intelligent treatment.

We should, however, concern ourselves with present day conditions, not forgetting that it takes some time to effect a change in former attitudes and traditions. Undoubtedly, if we are not too impatient, we will find the attitude of one prominent alumnus of a state university reflected in the attitude of other college graduates as time goes on. This man stated publicly that it was not the policy of the alumni of his university to attempt to tell the president of the university, the several deans, the director of athletics or the football coach how to conduct their several duties. He added, "If any of these men desire the advice and aid of the alumni, they know that such advice and aid will be cheerfully given."

After all, no man who graduates from any college in America is asked to pay all of the cost of his educational course of training. In one institution the students pay one-fourth, in another one-fifth, and in some less than half of the cost of their college courses. Certainly the graduates of today are indebted to the institutions that they attend and the institutions are in no sense indebted to them for accepting of their charity. It is ridiculous, then, for any group of alumni to assume the right of dictating in the matter of the selection of an athletic director or of a football coach, and unfortunate indeed is the president who surrenders the control of his university athletics to the

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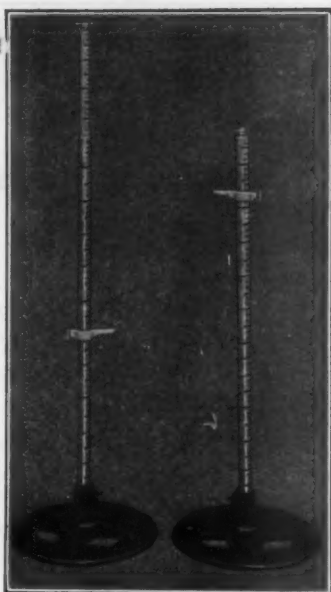
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alumni. This statement is not made as a reflection on the lives, morals or intelligence of college alumni generally. Rather, it is advanced with this premise in mind, viz.: if properly qualified executives have been charged with the responsibility of administering the technical work of the university, including the selection of the faculty, etc., those executives likewise should be qualified to assume responsibility for the administration of the athletic department, including the hiring of the football coach.

In a former article, it was suggested that in general those who are responsible for the financial administration of the athletic departments are not the chief offenders in the matter of the recruiting and subsidizing of athletes. There are many who will take exception to this statement. Among them will be those who believe that our college athletic problems for the most part relate to the so-called commercialization of college athletics. One illustration only will be cited in substantiation of this statement.

In an effort to ascertain what individuals contacted prospective athletes with offers of financial assistance the incoming freshmen athletes in the "Big Ten" Conference universities were interviewed one fall. The man who conducted the interviews was a stranger to the boys he questioned, but since he was introduced to them by some member of the athletic department of the institution that he was visiting, he at least was not considered in the light of an interloper. Each athlete was asked if any one had approached him with offers to attend a different Conference university than the one that he was attending. If he replied in the affirmative, he was asked to give the name or names of those who had attempted to subsidize him for athletic purposes. After this investigation was completed it was clear that not over twenty or twenty-five Conference alumni had been very active in the matter of recruiting athletes. The men whose names were included in the list of approximately twenty-five recruiters for the most part were not the agents of the athletic directors or coaches. Some of them had been inconspicuous in their undergraduate days and certainly were not entitled to be rated as alumni who had been conspicuously successful. It was clear that they were self-appointed field agents who undoubtedly would boastfully claim credit for the success of the teams if any of the recruited athletes succeeded in making the teams. These men were not a fair sample of the alumni bodies

of which they were a part. A few had made good in the usually accepted meaning of the word.

Another thing that this study revealed was that in many instances boys were importuned to attend this or that university with flattering promises of easy employment. When the boys arrived at the college town they generally found that the recruiters expected some one else to make good their promises, and, when the promises were not fulfilled, some of the boys returned home sadder and wiser, or perhaps they sought more attractive fields elsewhere.

The American college alumni are not a bad lot. Some of them do not yet understand why, if it was not considered wrong for them to do certain things years ago, the very same acts should now bring opprobrium upon themselves. It is the duty of the college to try to appreciate the fact that, to the average alumnus, the college is the child of his mind while the football team is the child of his heart. Fortunate indeed is the college president and the athletic director who can encourage the interest in athletics on the part of the alumni without permitting them to dominate the athletic department. This question as to where sovereignty is to reside so far as athletics are concerned is of grave importance to the modern American college.

Summary. In the beginning, the alumni were asked to send students to the college from which they had been graduated. Further, they were expected to contribute toward the running expenses of their college.

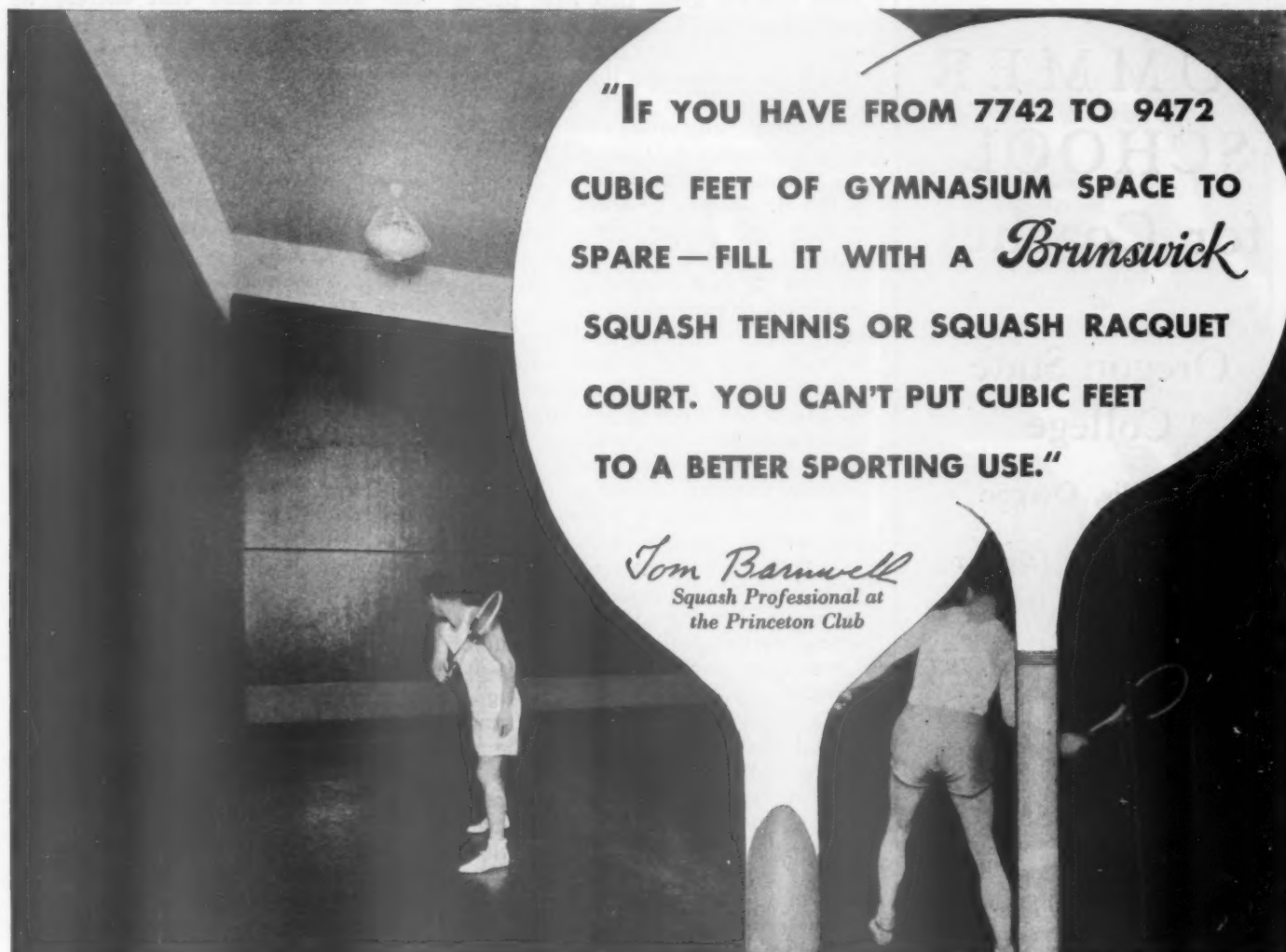
When the students managed and controlled their college athletics they still felt that they had a proprietary interest in the college teams, and, consequently, they selected promising athletes to send to college and they contributed to the expenses of the athletic department.

Today, in a large measure, the help of the alumni as field agents and as financial contributors is not so much needed as was formerly the case.

The great body of alumni are more than willing to play the game according to the rules. Those who cause the worst trouble are generally self-appointed field agents and dictators who expect to gain a certain reflected glory from a popular, attractive and spectacular athletic department.

Athletic Recruiting and Subsidizing

IN the preceding article attention was called to the manner in which the American colleges depended upon the alumni for help of various sorts.



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Some colleges today that have placed limitations on enrollment ask the alumni in different sections of the country to nominate a limited number of students from each section for matriculant consideration. Other colleges employ field agents to solicit the attendance of prospective students at their respective colleges.

With the growth of college athletics, the matter of the solicitation of athletes is now receiving consideration. Not many attempts so far, however, have been made to differentiate between the proper and improper solicitation or recruiting of athletes. Although the "Big Ten" Conference has ruled that the employees of the various athletic departments may not initiate correspondence or conversation with prospective athletes for the purpose of persuading such athletes to attend a Conference university, in most sections of the country it is quite generally considered legitimate for representatives—field agents, alumni secretaries, presidents or coaches—to attempt to recruit athletes so long as the athletes in question are not guaranteed financial help that is in the nature of subsidies.

In the last analysis, there is no more reason why an attempt should be made to recruit football players than there is for recruiting Latin or science students. Even though the trend at the present time is along the lines of selectivity, and scholarships and fellowships are being given students who may be chosen as especially fitted to pursue certain courses with the idea that thus business executives, chemists, missionaries, etc., will be prepared for special vocations, there are many reasons why prospective athletes as a class should not be recruited for college athletic purposes.

If a boy is singled out because of his athletic ability and is "rushed" for a certain college he naturally comes to believe, if he elects to enroll in the college in question, that he has honored the college by his presence and attendance. Such a boy is inclined to feel that, if he is indispensable to the college he has thus favored, the institution owes him something in the way of special favors or kindly consideration in the matter of credits; or perhaps he may expect financial pay for his services. The purpose of the college must primarily be considered as that of enriching the lives of its students. If students are to enter college for the purpose of enriching the college, then we may reasonably conclude that the colleges are not worth the money that they now cost.

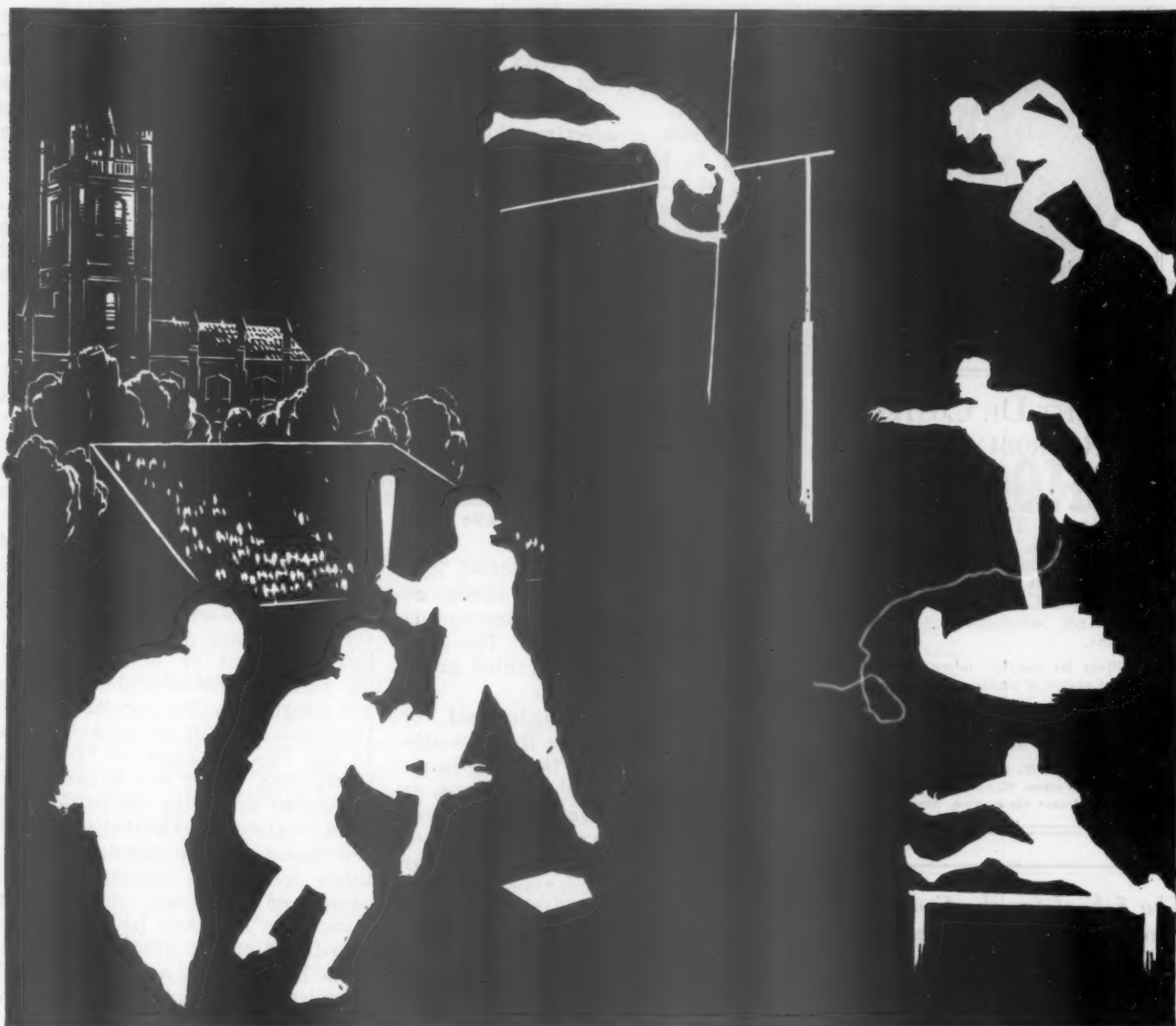
From the standpoint of the coach and the team, the man who plays foot-

ball with the idea that thereby he confers a favor on the college, the coach or the team is seldom as desirable a player as is the boy who feels grateful for the opportunity given him of representing his institution in athletics. As the citizen armies have always defeated the armies of mercenaries in the world's wars, so the athletes who are actuated by worthier motives usually win the places on the teams in competition with those who have an exaggerated sense of their own importance and who, consequently, expect others to pay homage to them.

There are several methods of recruiting athletes, some legitimate and some illegitimate, depending generally upon the manner in which the appeal is made. The word "recruiting" is used to connote solicitation without a promise of pecuniary rewards. All of the colleges in America publish catalogues designed to outline the courses of study and activities conducted by the individual college and to set forth in a dignified way the advantages that this or that institution may have as viewed from the standpoint of the high school graduate. In the majority of cases, space in the catalogues is devoted to the attractive side of student life, and athletics of various sorts are universally mentioned. Further, it has been a common practice for the institutions of higher learning to publish catalogues or bulletins dealing explicitly with the work done by the separate colleges or departments. Also, special bulletins are frequently printed dealing with such questions as opportunities for students to earn all or part of their expenses, the religious institutions on or about the campus, dormitories and rooming houses, as well as the athletic life of the college. When literature is sent to the prospective student, the special bulletins which it is thought will be of interest to the boy or girl who is trying to decide what college or university to attend are mailed to him or her.

Sometimes prospective students are classified and an attempt is made to interest them through the medium of the direct-by-mail advertising campaign. In the case of athletes, frequently athletic departments or others interested in the success of the college athletics in the institution under consideration secure the names of graduating high school athletes and an intensive campaign is directed toward these boys.

Frequently the advertising is supplemented by salesmen in the persons of field agents, alumni, students, alumni secretaries and athletic



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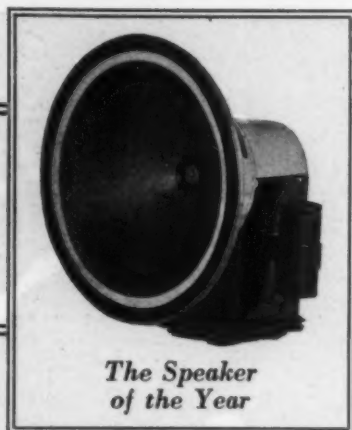
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coaches. The salesmen will not always concentrate on men who have shown athletic superiority in their high school days, but frequently such is the case.

Sometimes, prospective athletes are invited to banquets given in their honor, at which time they are introduced to the alumni and perhaps to the football coach or outstanding undergraduate athletes. The purpose of these dinners, of course, is that of selling the high school boys the idea that it is to their advantage to attend the institution that the alumni and the others represent. Without attempting to suggest which of the above mentioned forms of recruiting are undesirable, it may be stated that organized recruiting activities carried on in a systematic manner are generally attended by grave and serious results.

When an athlete is subsidized, it is understood that he is paid directly or indirectly for serving a college by and through his athletic skill. The most common subsidies are granted under the three following heads:

First—Work or employment of such a character either that the athletes are given all or the most lucrative jobs on or about the campus, or are given employment in which they do not make a fair return of labor or services commensurate with their pay for the same. Sometimes wealthy alumni offer athletes highly remunerative employment in the summer time, thus enabling them to secure funds sufficient to pay their expenses the ensuing year at college. In some instances, alumni have been known to guarantee athletes attractive employment following graduation provided they will attend the designated institution of higher learning. In many of the colleges employment bureaus are conducted by the athletic department or through the alumni secretary's office for athletes. In the "Big Ten" Conference, since there is a regularly constituted employment bureau in each institution set up for the purpose of serving the interests of all students who need to secure work to enable them to pursue their college course, it has been agreed that employment bureaus shall not be established or operated for athletes as a class.

Second—In many, if not in all, of the colleges and universities of this country, scholarships that are in the nature of the remission of tuitions or fees have been provided for students who are financially unable to pay the regular tuition charges of the institution. The British colleges and universities are attended quite largely

by sons of wealthy or well-to-do parents, while in America it has been assumed that the poor boy should not be denied a college education because of his or his father's low financial standing in the community, and, consequently, the attempt has been made to enable young men without a financial background to attend college. A large number of the college athletes would not be able to attend college if they were required to pay the usual tuition fees; consequently the offer of exemption of fees and tuition is of natural interest to any graduating high school athlete who is forced to depend largely upon his own efforts for his college course. Some colleges have created athletic scholarships that are available only to prospective athletes. Where athletes are thus treated as members of a preferred group in the usually accepted sense of the word, they may be considered as having been subsidized. Sometimes the scholarships made available for athletes are provided by alumni, luncheon clubs or other groups of business and professional men and are not awarded by the regularly constituted university or college authorities. In the Intercollegiate or "Big Ten" Conference, if any boy is assisted to the extent of having his tuition payments waived or extended until after graduation by the regularly constituted scholarship committee, it is considered that under these circumstances he has been legitimately assisted. If on the other hand he accepts help of this sort from outside committees or funds, he is not considered as eligible to represent his university in intercollegiate competition. It is assumed that the committee made up of the appointees of the president's office, deans, or members of the faculty will not award scholarships for the purpose of subsidizing an athlete, and it is further taken for granted that if other committees or organizations do offer scholarship awards that the same will be considered in the nature of an athletic subsidy.

Third—In addition to employment and leniency in the matter of payment of tuition charges, a great many students find it necessary each college year to borrow money to enable them to continue their college work. In this respect, athletes are not unlike other students, although not all athletes are forced to go in debt for their college education. Many different kinds of abuses have developed under the loan system. Sometimes a boy is loaned money by agencies outside the college with the general understanding that he will never be asked to pay

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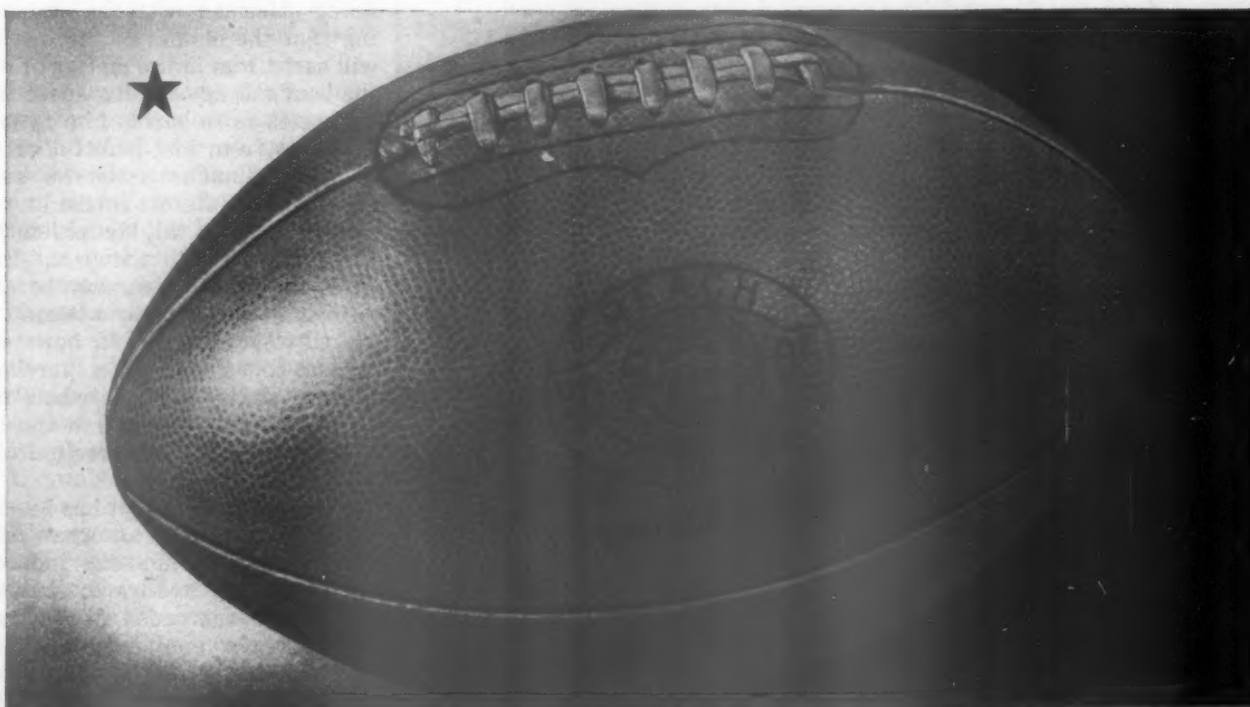
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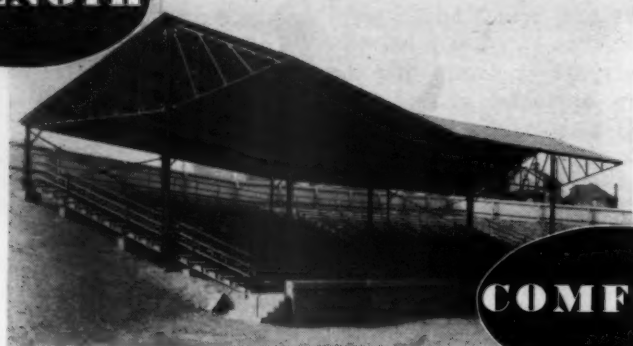
ball is the one football that *can't* sprout the defects that make a "backslider." For the Reach Double Lining holds it in correct shape as long as it's played. No bulges—no "dead spots." So the Reach Football assures your team of having absolutely dependable ball-action throughout play.

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the notes. The loans may be made, as has been true in some cases, to the father of the boy concerned. In all of the universities that compose the "Big Ten" Conference, loan funds administered by university authorities have been provided to aid needy students. Consequently, it is not necessary for an athlete to look to others for help of this sort. If he is worthy and needs the help, he can get the same by appealing to the loan fund committee. It is assumed that the men who constitute the committee on loans will not misuse college investments for the purpose of subsidizing athletes. Frequently, however, those who do not have close touch with the college, and who are primarily interested in the athletic success of the institution, create loan funds to be used solely for the purpose of buying athletic ability.

In addition to the assistance that may be legitimately given by properly constituted employment bureaus, scholarship and loan fund committees, there have been instances on record where athletes have been paid fixed salaries for playing on college teams. There are not so many cases of this kind as are generally believed to exist. Money used in this manner is seldom taken from the college athletic earnings; rather it is contributed by alumni, business men or others. Boys are sometimes sent to preparatory schools with the understanding that their expenses while attending the preparatory schools and later as undergraduates in a certain specified college will be paid by some unknown persons. Sometimes an athlete is given employment as a bond or advertising salesman with the understanding that the alumni of his institution will assist him in the matter of buying the bonds or advertising space to such an extent as to enable him to pay his expenses from his doubtful earnings.

If an alumnus assists a boy because of his interest in the latter, his motive may be highly philanthropic and not subject to criticism. In such cases the transaction may be carried on openly without any attempt at secrecy or subterfuge. If, however, the transaction savors of a purchase of athletic ability and the whole matter is veiled with secrecy and the boy is made a party to the deceit, it is undesirable.

Whenever an attempt has been made to assist athletes in an organized way by giving them financial inducement to attend any college or university, the college concerned has ultimately lost caste in the educational world. It is possible for an institution to win games for the time being with teams made up of hired players; however,

the success is transitory. The colleges that have notoriously attempted to win football games with professional athletes have over a long period of years been unsuccessful in accomplishing the desired results. There are several reasons that may be cited to show why this is true. In the first place if one player is paid for playing football, the others soon know about it and, unless they are likewise paid, the morale of the team is disrupted. If all of the men are paid, invariably some will be paid more than others and as a result jealousies creep into the squad. If the players to any extent are openly hired to represent a certain college on the football or other athletic fields, the fact almost immediately becomes known, and the rival institutions either attempt to compete on the same basis or refuse to schedule games with the college whose teams are made up of hired players. As a man will not play golf with another who cheats, so the college athletic managements will not schedule football games with another institution that hires or permits the hiring of college athletes. If all of the colleges in a conference follow the practice of recruiting and subsidizing athletes, in a short time the institutions represented in this group find that their conference is looked upon as an outlaw league. When this situation develops, the president, faculty and board of trustees invariably take hold and for a few years thereafter, at least, some of the abuses will be done away with or at least minimized. A college cannot any more afford to lose standing in the educational world because of corrupt athletic practices than can a doctor afford to lose his professional standing in his community.

While the expenditure of large sums of money for professional college athletics may for a year or two result in victories won on the field, in the long run it will be found that the money thus spent has been wasted, because other universities will have won more championships with unsubsidized players than has this first institution won with its mercenaries. The proof of this statement may be found in studying the athletic histories of colleges and universities. Such a study would reveal that, taken by and large, the universities that year after year have won more than their share of athletic games have not been represented by teams made up of hired players. On the other hand, the study of the history of the colleges that have been notorious because of their low ethical standing in the matter of securing athletic material will reveal



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Shin splint is quite a common athletic injury. It is really a severe inflammation affecting the fibula and tibia, as well as the deep band of tissues connecting the muscles in that region.

Antiphlogistine

applied in a hot, thick layer over the affected area, combined with immediate rest and followed later by hydrotherapy and stroking massage, will be found of great help in relieving this injury and cutting down the enforced idleness of the athlete to a minimum.

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Complete files of the first nine volumes, except Volume IV, are also desired.

Any subscriber willing to dispose of these copies please communicate at once with the Athletic Journal.

Athletic Journal Publishing Company
6858 Glenwood Avenue, Chicago

that these institutions have not won so many victories over a period of years as have their rivals who did not, in an organized way at least, subsidize their athletes.

One of the most serious aspects of the recruiting and subsidizing problem relates to the control of college athletics. Invariably the men who procure paid players insist ultimately in dictating the athletic policies of their colleges and universities. The athletic procurers and recruiters are quite generally the men who condemn the coach when he does not use this or that man who has been sent to him and who cry the loudest when the team loses. These men, further, quite generally feel that, if they obtain the athletic material, they should be permitted to select the coach who will handle the material thus obtained. Consequently, a conflict between such men and the university authorities is inevitable. The wise coach is the one who does not look for favors from the athletic procurers. If he does accept such imaginary favors, when athletic adversity comes he is sure to find himself in a position between the forces outside the institution and the educational authorities.

So far, the ethical side of the recruiting and subsidizing problem has not been stressed. In the last analysis, however, the man who will not play the game according to the rules is a cheat and a fraud. He may try to justify his position by suggesting that he is forced to practice dishonesty because his rivals are dishonest in their practices, but the fact remains that any man who attempts to beat the athletic rules is not a good sportsman in the eyes of his competitors and in the eyes of the world. The coach who has confidence in his own ability, providing he has a reasonable number of young athletes from which to develop a team, will not only win more victories but will maintain his self-respect and the respect of his fellows in larger measure than possibly can the coach who realizes his own inability to compete according to the rules and consequently endeavors to win his games with athletes who are highly developed by others. No system of recruiting and subsidizing can be justified by the maudlin argument that a poor boy is entitled to whatever help he can get. If the activities are carried on clandestinely, the athletes must share in the cheating.

While it is safe to say that hired athletes have at some time or other played on some team representing every college in this country, yet the fact remains that some institutions

through the years have not only not been guilty of subsidizing athletes but have successfully restrained others who were inclined to load up the college teams with paid players. It is a mistake to indict the colleges in general for subsidizing athletes. Those who have been guilty of illegitimate subsidizing practices, however, have brought discredit on the whole college athletic system. Today there is unmistakable evidence at hand to show that college presidents, governing boards, faculty, athletic directors, students, alumni and coaches are determined that so far as their institutions are concerned they, like Caesar's wife, will be above suspicion.

Summary. While recruiting was not considered as an evil so far as athletics was concerned in the earlier days of the American colleges, today attempts are being made to define legal and illegal recruiting to the end that illegal recruiting may be reduced to its minimum. There has always been cheating in business, in professional life and even in matters pertaining to the administration of the colleges, and there always will be some cheating in connection with college athletics. We are beginning, however, to realize that the faults to be found in college athletics relate to the baser side of men's lives and that the faults are not inherent in athletics.

A poor boy who happens to be an athlete is entitled to the same aid, assistance and emoluments that may be given to other students. The assistance, however, should be given him not because he is an athlete but because he is worthy and needy. It is usually safe to assume that the regularly constituted employment bureaus, scholarship and loan fund committees will not misuse their power and funds in the way of subsidizing athletes, and it is also generally safe to assume that employment bureaus, scholarship and loan fund committees which are established solely in the interests of athletes will misuse their funds in the matter of subsidizing the members of the college teams.

To be continued in May issue

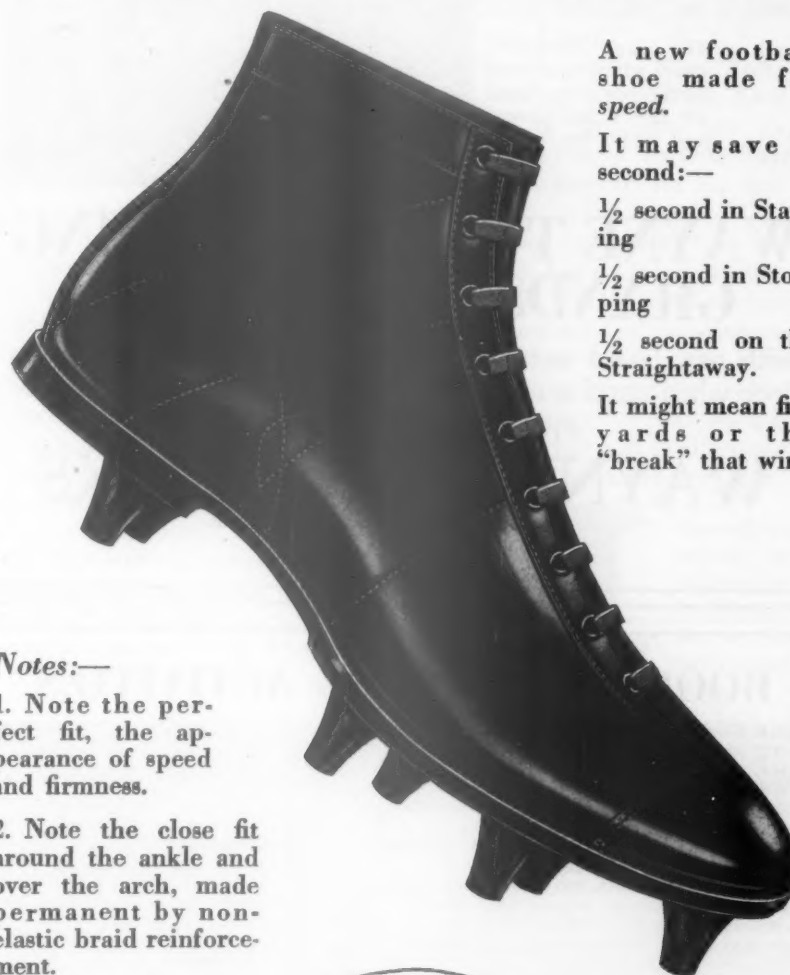
An Intramural Program for State Teachers Colleges

By Lloyd E. Rountree

Kansas State Teachers College, Pittsburg

ONE of the chief aims of intramural athletics is to provide a sport for each student in his leisure time. Following this aim the Kansas State Teachers College of Pittsburg, Kansas, has adopted this creed: "A sport for every man and

Announcing the NEW GOLDEN 1/2 SECOND SHOE



A new football shoe made for speed.

It may save 1/2 second:—

1/2 second in Starting

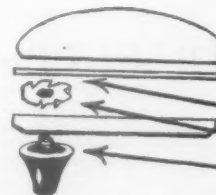
1/2 second in Stopping

1/2 second on the Straightaway.

It might mean five yards or the "break" that wins.

Notes:—

1. Note the perfect fit, the appearance of speed and firmness.
2. Note the close fit around the ankle and over the arch, made permanent by non-elastic braid reinforcement.
3. Note the heel counter—well moulded to the heel, preventing slipping and friction.
4. Note the foot shape of the last—offset with the foot, narrow at the toes, wide ball, close fitting instep.
5. Note the cleats—they are long, light and triple locked.
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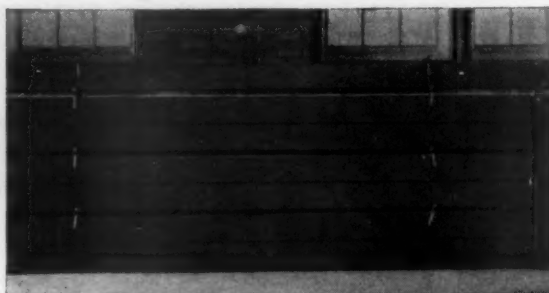
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- Locked on inside
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The steel stringers upon which seat and footboards are placed are swung flat against wall when not in use.



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with new board storage rack permits full use of gymnasium floor when stand is not in use and eliminates storage problem.

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Introduce your track men to the Track and Field Honor Athletes of 1930!

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The 117 pictures (without descriptive reading) of the track and field performers represented in the February issue are available for posting in your gymnasiums.

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every man in a sport."

In 1920, the College had only a small intramural program, consisting of basketball, playground ball, swimming and track. At that time these sports were all that were demanded. In 1922 and 1923, the demand for something new was felt, especially during the fall semester. Soccer football was tried but, because it was a foreign game and hence strange, it was found unsatisfactory.

Experimentation in various sports followed. Speedball was tried, but it met with little success. The directors found that there was little interest in a game that did not closely parallel one of the major sports. The Physical Education Department then began to educate the students to the liking of other games. Soccer and speedball were taught in a games class. The rules and methods of playing were studied, and gradually a liking for these new sports took form.

In the fall of 1930, an intensive campaign to interest enough teams to enter competition in speedball was begun. The four fraternities on the campus with four independent groups organized teams, and a double round-robin schedule was run off in which the groups were shown the similarity of the game to football and basketball.

Touch football was tried and for the first time a fall sport was found that met with fair success. A five-team league was formed and in accordance with the usual custom of play with only a few teams, a double round was played. Since then almost anything tried has met with success.

The majority of schools use a general division of the school year into three seasons, fall, winter, and spring, for playing the different games. Because of the great number of students attending the summer sessions at Pittsburg State Teachers College, it was deemed advisable to add to the general division a fourth—summer. The following is a list of the sports in their respective seasons.

Fall (to Thanksgiving)

Speedball

Touch football

Unorganized Activities:

Golf

Tennis

Horseshoes

Swimming

Handball

Winter (to Easter)

Basketball

Water polo

Handball (singles)

(Ladder tourney)

Free throw tourney

Wrestling

Volley ball

Spring (to June 1)

Volley ball
 Playground ball
 Horseshoes (singles and doubles)
 Tennis (singles and doubles)
 Senior American Red Cross life-saving instruction
 Golf
 Swimming meet
 Track and field meet

Summer Session

Playground ball
 Tennis (singles and doubles)
 Horseshoes (singles and doubles)
 Senior American Red Cross life-saving instruction
 Golf tourney
 Swimming meet
 Track and field meet

It has been found by those interested in this phase of physical education that a knowledge of rules was necessary for the thorough enjoyment of each participant. This difficulty was removed by three methods.

Mimeographed copies of the rules, in brief, were posted about the college on bulletin boards. Anyone could secure copies, and several copies were posted in the fraternity houses.

The second method was through an Intramural Council made up of the managers of each team, the director of the department and his assistant. This Council studied the rules and their interpretations as a group; so there were no misunderstandings as to the methods of officiating. The group was also the means of presenting new sports to the student body.

The third method was the use of games classes to study the rules and methods of playing. All three methods worked well.

One of the latest innovations in the department is the giving of a Participation Trophy by the College to the teams having the most points at the end of the school year. The idea of a trophy for this purpose is not new to the universities, but not many teachers' colleges are able to afford this incentive. The adoption of this idea, along with a point system, proved a huge drawing medium. Challenge trophies had long been given in almost every sport by business men of the city, but an additional trophy that meant participation in all sports, a winner in several and good sportsmanship spelled a change in attitude towards intramural sports.

The scoring system used, briefly, is as follows:

Team Points

1. 25 points for each team entering a sport.
2. 5 points for each game played.

The Coach Knew More Than Basketball

"HEY, fellows, Coach Wilson has signed up for five years." "That's great. He knows the game. A couple of months ago it looked like the downtown alumni would get him. It's lucky for us he knows something more than basketball."

Most of the Northville players had also been on the football team. After successfully completing a stiff football schedule they had started out well at the cage game but the long grind finally began to tell. They played a fast game the first half but slowed down badly in the second. The loss to Centreville by one point had brought the undercurrent of dissatisfaction to the surface.

Coach Wilson, appreciating that the boys had used up their reserve of vitality in four months of hard competition, had decided that sunshine was the tonic they needed. Citing the observations of competent medical authorities, he had persuaded the school authorities to install an Eveready Solarium Unit. The results are indicated by the further conver-

sation of the players, talking over the season just closed.

"That Eveready carbon arc lamp is great stuff. Before we started those sun baths I hardly got a basket in the second half."

"We all noticed that. And we all saw you get away from Keen near the end of the game last night to sink those three baskets that won the championship for us and gave you high point honors . . . Here comes Doc. Saunders."

"Hello, boys! Our Eveready Solarium Unit is after another championship. Since most of the students have been taking regular sun baths the absences resulting from colds have decreased forty per cent. We are going to hang up the best health record this year of any school in the state."

Eveready Sunshine supplies the same invigorating and revitalizing rays that are found in mid-summer sunshine.



Eveready Carbon Arc Solarium Units provide artificial sunshine at natural intensity for group irradiation. Smaller models of Eveready Carbon Arc Lamps are available for use in restricted quarters and for individual irradiation.

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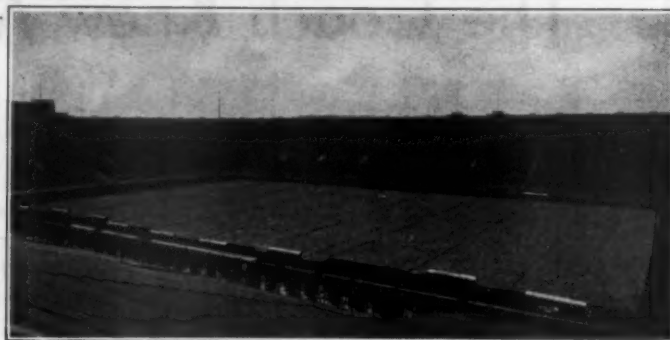
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Relays and special events for High
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Write for Information

Howard Wood, Manager
Washington High School, Sioux Falls, S. Dak.

3. Loss of 5 points for each game forfeited.
4. Loss of 5 points for each case of poor sportsmanship.
5. 100 points for the winner of a tourney.
6. 90 points for second place.
7. 80 points for third place.
8. 10 points less to fifth place and thereafter 5 points less.

Individual Points (Counting Toward Team Scores)

1. 3 points for entering sport.
2. 5 points for first place.
3. 3 points for second place.
4. 2 points for third place.
5. 1 point for fourth place.
6. Loss of 1 point for poor sportsmanship.
7. Loss of 1 point for forfeiture.

The points a team makes are put on a score card kept up to date by the assistant director. The total points made at the end of the sport season are then put on a permanent score card by the director and at the end of the year these points are added together, and the team having the most points receives the Participation Trophy. The points an individual may make in the individual sports are added to those of whatever team he is a member and go into the final score.

In the beginning, the method of notifying by telephone each manager before his team played was tried, but now, because of the time lost, a schedule of the games to be played is mimeographed. These schedules are placed in conspicuous places about the gymnasium, each team manager is furnished with one, and one is posted in each fraternity house. The schedule in the intramural office is designated as the official one, and all others are to be checked by it. This plan eliminates any possibility of a team manager or player not knowing when his team is to play. All work toward a new sports schedule is done through the Intramural Council. All scheduling of games is done by the director.

The coaching school of the Physical Education Department has proved immensely helpful in providing officials and coaches for the teams. The students of these classes are graded on the work they do in officiating and in the coaching of teams. This scheme not only helps the students get grades and experience, but it also provides fairly good officials without cost.

Last year, the intramural program served approximately 500 men of the college. Sixteen basketball teams called for the use of two divisions with eight teams in each. The first round schedule was played off; then

the four best teams of each division were placed in one group, the remaining eight teams were put in another, and a second round was played. The team with the highest percentage won the tourney.

Volley ball made its debut with marked success and other sports were well received on last year's program.

Publication of a booklet is the next thing the department is planning. This booklet will contain all information concerning the sports, rules of the games, rules of the department, pictures of winners and records made in former years in comparison with records of the present day.

At midyear this season the department had served about 300 men in five sports, and in the remainder of the program, the expectations are that more men will be served this year than formerly.

Second Wind

By Towner Smith

Track Coach, Western State Teachers College, Kalamazoo, Mich.

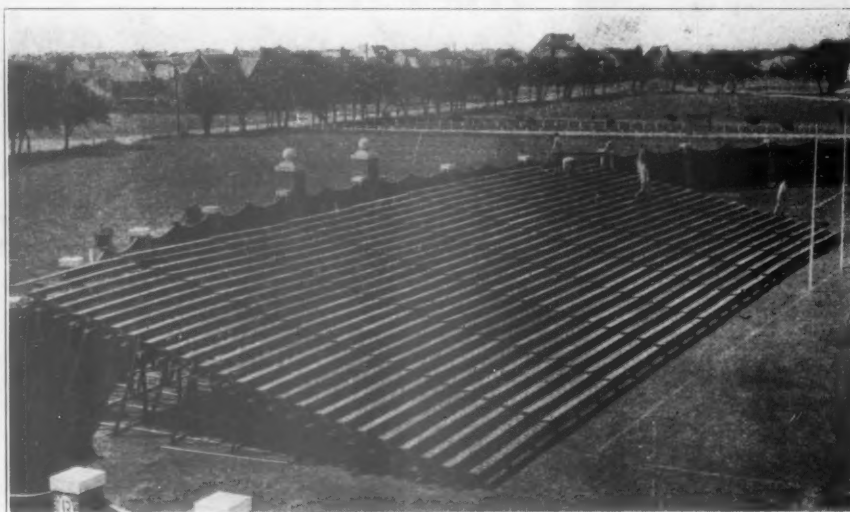
WHAT is second wind? Does such a thing actually exist? If so, how may the best use be made of it? Many a student of track comes to the place where he asks himself these questions. Very little is written on the subject; few coaches have made a study of it; yet its importance is unquestionable.

Second wind is the adjustment of the heart and lungs to an excess capacity equal to handling the fatigue products thrown into the blood stream when an exertion of the body is made. Why do we get tired? Why do muscles "tie up"? Simply because there is a congestion in the blood stream due to an exertion that we have not prepared for.

Ninety-nine per cent of the runners have not learned the secret of successful running; the other one per cent have, and they are the champions. Therefore, we realize the necessity of obtaining this faster heart action to keep pace with the extra body exertion; to supply the necessary blood to the muscles and to draw off the venous blood. When this action takes place we have our second wind, but at what a price. In order to gain our second wind we have thoroughly loosened up on the track and then run through half of the race before feeling the relief that comes when this adjustment takes place. What a struggle it has been to keep going and waiting for the heart to catch up!

Warming up is supposedly for the loosening of the muscles, but it should

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TEXAS TECH COLLEGE, LUBBOCK, TEXAS

SHIN SPLINTS

Shin splints have never been quite satisfactorily explained, except that the pain is localized along the shin bone, and causes a great deal of grief to the victim. However, it is, no doubt, caused by running on boards during the winter season or on hard outdoor tracks. The symptoms are dull, constant pains along the shin.



Give the athlete a complete rest for a day or so, apply heat, and bandage with a 3-inch Thermo-Tex Bandage. This treatment will effect a cure quickly and will not deprive you of the services of a good man.

The Thermo-Tex Bandage (ACE weave) has a pure wool filling which offers the beneficial qualities of heat plus the pressure and support which characterize the Ace Bandage.

The above description is part of the interesting facts on bandaging contained in the Ace Athletic Manual. The coupon will bring you a copy.

Send me further information on Thermo-Tex and copy of the new Athletic Manual.

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also be for shifting the heart and lungs from normal to abnormal (low speed to high speed) in as quick a time as is possible. It should be for getting the heart, lungs and muscles coordinating.

After the preliminary warming up, the athlete should rest a short time before his race, and just as he is called to toe the mark he should take four or five deep breaths, inhaling through the nose, holding for five seconds and then exhaling through the mouth. He should force this action; it is the pump that nature provided, for it causes the lungs to act as an auxiliary pump, drawing blood into the capillaries when the athlete exhales and forcing it out against the heart when he inhales. The movements of the chest and abdominal walls are amplified. Increased excursions are made by the diaphragm for each breath. The ventilation by the lungs is improved, the heart dilates, steadies and adapts itself to the increased task and the athlete is ready to start his race.

Then if the runner starts the race fast, sprints for the first fifty yards, the heart will be pumping at the rate desired and necessary for a person exerting himself. Other advantages of starting fast might be to utilize the nervous energy to an advantage, to obtain a good position, to discourage the competitors, to make time while the runner is fresh and has the speed and because it is easier to slow down into the pace than gradually to work up into it.

The theory advanced herewith was tried on one of our milers, Ray Swartz, who placed in the National Collegiate Meet and ran the third fastest mile in the United States in 1930. He responded admirably to this action and lowered his mark for the mile twelve seconds in one year, which is considerable when running close to record time.

The College Honor Roll in Track and Field

(Continued from page 12)

follows of the New York University broad jumper on the Honor Roll:

"Sol 'Happy' Furth could do practically everything well in the program of track and field events. His short height (5 feet 7 inches) was counteracted by his bundle of nerves, and his self-confidence. A superb start, fine speed and undaunted fighting spirit combined to make Furth a crack hurdler indoors where he broke one of Earl Thomson's world records and equaled another.

"Furth twice won the Intercolle-

giate Indoor broad jump and as a senior was $\frac{3}{8}$ of an inch behind the outdoor winner with a jump of 24 feet 7 inches. This was Furth's best jump in his four years at New York University and placed him on the Track and Field Honor Roll for 1930. We found that he always benefited by a considerable rest before a big meet. His only practice each indoor season was to get in his steps, and outdoors he would try more for height than distance. Furth's best event is the hop, step and jump, in which he has bettered 48 feet."

"David M. Myers of New York University, who last year threw the javelin 206 feet 7 inches, was 5 feet 11 $\frac{1}{2}$ inches tall and weighed 187 pounds. In basketball and football, he played running guard and quarterback; in track, he ran the quarter and both hurdles, threw both shot and discus, and in his junior and senior years specialized in the javelin. Myers was powerfully built about the chest and shoulders and had very strong arms.

"In throwing the javelin he used a wind-up of his own as he approached the take-off line. This wind-up was quite similar to the baseball pitcher's, but of course was from the side, not across the chest. It increased in speed as Myers went forward to the take-off, was checked when he checked his approach, and in perfect rhythm the javelin was hurled with all the force of the arm and upper body. Myers was peculiarly sensitive to cold and always did his best in torrid weather. He threw left-handed." This information was supplied by Emil Von Elling, N. Y. U. coach.

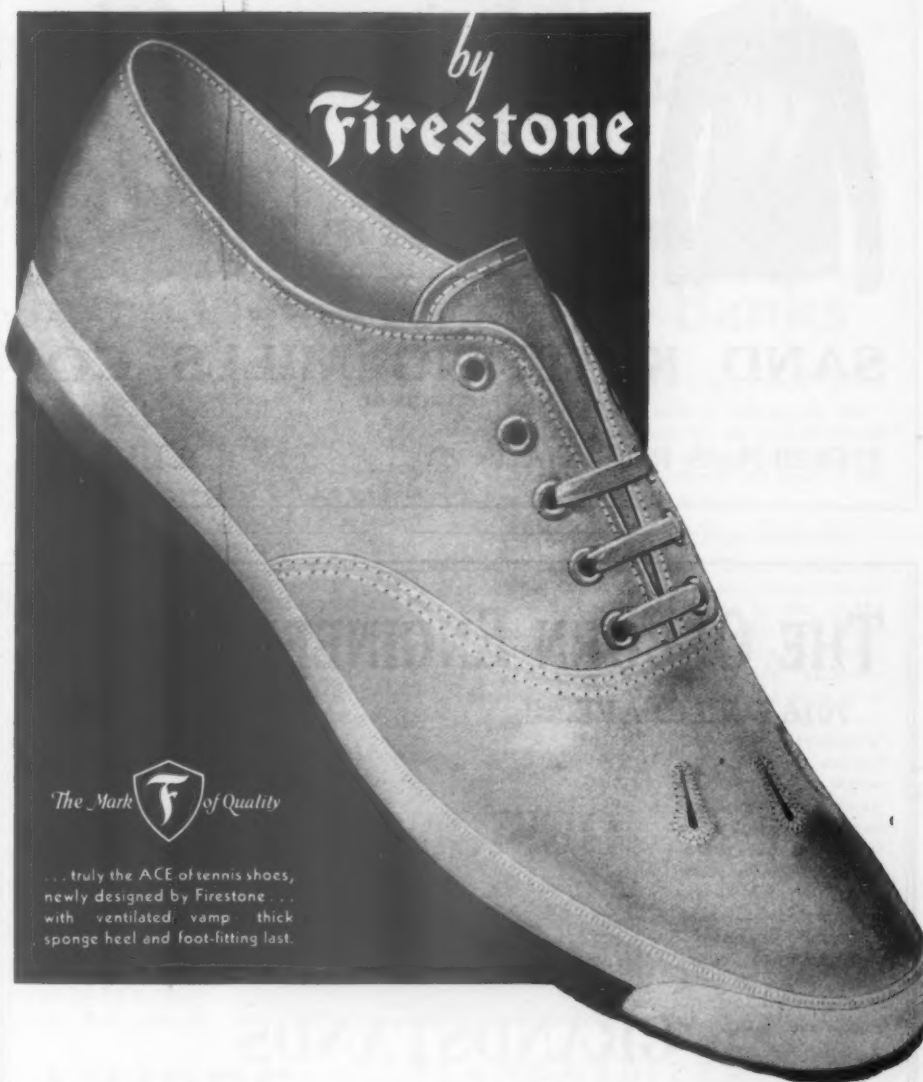
Ike Hables of Stanford, who won a place in the 440, attains his speed largely through sheer drive, his form being rather poor. He is short, stocky, and powerfully built. Hables is a great competitor.

Ehrlich of Kansas State, who placed in the high jump, is described as follows by D. G. Griffiths:

"Milton C. Ehrlich, Marion, Kansas, who as a junior captains the Kansas State Agricultural College track team this year, is one of the outstanding high jumpers in this section of the country. As a sophomore, he won the Missouri Valley Intercollegiate Athletic Association championship and placed in a tie for second in the National Collegiate meet at Chicago last June.

"Ehrlich won the Texas Relay last year by clearing the bar at 6 feet 3 $\frac{1}{4}$ inches. Competing against Ehrlich were such men as Shēlby of the University of Oklahoma, Shaw of Wisconsin and Nelson of Butler University. This however was not his best

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with ventilated vamp thick
sponge heel and foot-fitting last.

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performance, as he jumped 6 feet 3 $\frac{5}{8}$ inches in a dual meet between the Kansas Aggies and the University of Kansas teams. He also placed in the Kansas and Drake relays. At the present time he holds the K.S.A.C. indoor and outdoor records and is expected to better his previous marks this year.

"The Kansas Aggie captain, who stands 6 feet 1 inch and weighs 150 pounds, clears the bar in almost perfect form. He approaches the bar slightly from the left of the front and takes off about 34 inches from the bar. Taking off with his right foot which is placed at about a 45 degree angle, he gives a good kick with his left foot, which aids materially in clearing the bar. Both of his arms are up and back. On his best jumps he goes over in practically perfect form, on his back, lighting on his hands and knees."

Penn State has been represented by several great distance runners in recent years. Of Rekers, who won a place on the Honor Roll with the two-mile, his coach Nat J. Cartmell writes:

"Paul E. Rekers is from Rochester, New York, the home of William J. Cox, former Penn State track star. In fact, Rekers is a great friend of Bill Cox and it was due to the influence of Cox that Rekers entered Pennsylvania State College in the fall of 1927.

"Rekers had never done better than 4:40 for a mile before entering Penn State. He ran on a winning freshman cross-country team but was by no means the best man on the team. However, by hard work and careful, conscientious training, he made a place on a winning four-mile relay team in the spring of 1929—this team holds the Pennsylvania Carnival record. (Meisinger, Rekers, Cox and Offenhauser.)

"Last winter Rekers won the I.C.-A.A. indoor two-mile championship, establishing a new record of 9:22.2; just eight seconds better than the old record.

"The style used by Rekers is a bit short, and his arm action is 'jerky' and a little too aggressive for distance running, as viewed by the coaches of the school of theory. Rekers runs with a low knee action and a fairly wide arm action. His legs and arms, however, work in perfect unison. He has power, and when in condition his endurance is remarkable.

"His faults in style and form are compensated for by virtue of his love of running, his desire to win, his clean living and enduring training rules. Rekers is a fine example of a made runner. No defeat ever discourages him and no victory ever satisfies him. His one desire is to run gamely and

well. He wants to have a great season in this, his senior year."

E. W. Bates, Acting Manager of the Yale track team, writes as follows of George V. Wolf:

"As a freshman, Wolf of Yale won the high jump against Andover at 5 feet 11½ inches, and against Harvard Freshmen at 5 feet 11¾ inches, placing second in the Princeton Freshmen meet at 6 feet, and taking third in the Harvard-Yale-Oxford-Cambridge meet in England. In 1928, he tied for second in the Indoor I.C.A.A.A.A. at 5 feet 10 inches. During the seasons of 1929 and 1930, he reached his peak, in 1929 winning the high jump against Harvard at 5 feet 11¾ inches, against Pennsylvania at 6 feet 1 inch, and placing fourth in the I.C.A.A.A.A. at 6 feet. In 1930, he tied for first in the Indoor I.C.A.A.A.A. at 6 feet 3½ inches, and in the meet against Cornell won at 6 feet 1½ inches."

"As a freshman," writes Bates, "Charles H. Engle was a member of the Yale Freshman Medley Relay team which placed third in the Indoor I.C.-A.A.A.A. In the spring meets, he won the 440 against Andover, Princeton, Freshmen and Harvard Freshmen, setting a record of 49.2 seconds in the meet with Harvard. In 1928, he was a member of the mile relay team which finished fourth in the I.C.-A.A.A.A., and which won the Penn Relays. In 1929 he won the 300 in the A.A.U. meet in 33.2 seconds, and also won the 440 in meets against Harvard, Pennsylvania, and Princeton. He placed second in the I.C.A.-A.A.A.

"In 1930, as a senior, Engle reached the high point of his career, winning the Buermeyer 500 in the N. Y. A. C. meet in 59.6 seconds. In the Indoor I.C.A.A.A. he ran his greatest race as anchor man on the mile relay team, coming from behind to gain 15 yards, and coming within a yard of the tape at the finish, to take third for Yale. In this race he was unofficially timed in 47.6 seconds. In the outdoor I.C.A.A.A. he won the 1930 championship, winning the 440 in 48.2 seconds."

"As a freshman," Bates writes, "Frank N. Conner of Yale won the hammer throw in the Princeton Freshman meet with a throw of 151 feet 5 inches, and in the Harvard Freshman meet won with a throw of 155 feet $2\frac{3}{4}$ inches. In 1929 he won against both Harvard and Princeton, with throws of 155 feet $\frac{3}{4}$ inch, and 165 feet $2\frac{1}{2}$ inches, respectively. In 1930, he again won against Harvard and Princeton, with throws of 170 feet $4\frac{1}{2}$ inches, and 168 feet $8\frac{3}{4}$ inches, respectively. In the I.C.A.A.A., he won the 1930 championship in the



**Paul "Tony" Hinkle
of Butler**

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hammer, setting a new intercollegiate record of 177 feet 10 $\frac{3}{4}$ inches."

Haverford College Automatic Race Timer

(Continued from page 19)

An instrument employing the methods described was used at Haverford College in the spring of 1930 in a number of track meets. It was employed unofficially at the Middle Atlantic States Championship Meet in June. The times compared favorably with those recorded by human timers, although the purpose of the demonstration was to show the method of timing races rather than the resultant times recorded. It is evident from the discussion of reaction times that this instrument would be expected to indicate longer times than those recorded by human timers. This was indicated in the case of the Middle Atlantic States Meet, where the human timers recorded times which on the average were about 0.08 second too short. This shows the probable effect that would result from using this device officially. Times would be lengthened slightly. In spite of this, however, the accuracy would be certain to 0.01 second. Under present conditions an error of at least 0.10 second is quite probable, due to the uncertainties of the reaction time of the human timers.

The device has been demonstrated throughout the Middle West and East. It was shown at radio shows in St. Louis and Philadelphia, besides being demonstrated at the National Collegiate Athletic Association Conference held in New York.

Several minor changes have been made whereby it is possible to both start and stop the clock by intercepting the light beam. This method of timing a race may be applied to automobile races, horse races, etc.

The author wishes to acknowledge his obligation to Dr. Henry V. Gummere for suggesting this project, and to Dr. Frederic Palmer, Jr., for advice and assistance in carrying it out.

The Physical Education Plant and Program at a High School of 2,000

(Continued from page 17)

mitted to wear the official school sweater.

Manager System

There are a student manager and several assistants for each sport. Their duties are largely looking after equipment, publicity, checking attendance, running errands, etc. Their duties are outlined in detail. They have definite assignments, and a careful

service record is kept for each manager. The managers have a very important part in the work of the department. Student managers have nothing to do with the making of schedules and the handling of money.

All league schedules are made out and officials appointed by the league of which this school is a member. All other interscholastic events are scheduled by the Athletic Director, and officials are arranged for by him. Ticket sales and receipts are handled by faculty representatives, and receipts turned over by them to the Secretary-Treasurer of the Board of Education, who keeps the accounts and pays the bills.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, OF THE ATHLETIC JOURNAL, published monthly except July and August at Chicago, Ill., for April, 1931.

State of Illinois,
 County of Cook, ss.

Before me, a Notary Public in and for the State and county aforesaid, personally appeared John L. Griffith, who, having been duly sworn according to law, deposes and says that he is the Owner of the ATHLETIC JOURNAL, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, JOHN L. GRIFFITH, 6858 Glenwood Ave.

Editor, JOHN L. GRIFFITH, 6858 Glenwood Ave.

Managing Editor, JOHN L. GRIFFITH, 6858 Glenwood Ave.

Business Manager, JOHN L. GRIFFITH, 6858 Glenwood Ave.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)
 JOHN L. GRIFFITH, 6858 Glenwood Ave.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is..... (This information is required from daily publications only.)

(Signed) JOHN L. GRIFFITH, Editor.

Sworn to and subscribed before me this 27th day of March, 1931.

(Seal)

ROY C. CLARK.

(My commission expires March 23, 1932.)

Physical Education Program for Girls

The attempt is made to give a graded program of work suited to the various age groups. The first two years are devoted largely to team games, the last two to individual games and exercises.

Girls' Gym Class Schedule of Activities

Freshmen — FALL — Speed ball; WINTER—Formal work emphasizing posture (Thanksgiving to second semester), fist ball, dancing (social), (second semester to spring vacation); SPRING — Baseball, track.

Sophomores—FALL—Soccer; WINTER—Formal posture work, basketball, social dancing; SPRING—Baseball, track.

Juniors—FALL—Tennis; WINTER—Basketball, folk dancing; SPRING—Tennis, archery.

Seniors—FALL—Tennis; WINTER—Basketball, clog dancing; SPRING—Tennis, archery.

At the beginning of the year every girl in school is given a personal posture examination and conference. Special posture classes run through the entire year.

Archery, quoits and posture work are given to all restricted classes.

Swimming for non-swimmers is given throughout the entire second semester.

Girls' After-School Sport Program

These activities are open to every girl in school. Instruction is given after school in all the activities offered except golf. Inter-adviser room tournaments and interclass tournaments are held in each sport. These tournaments are organized either as double elimination tournaments or as leagues in which each team plays four games. The instructor or coach in charge of each sport picks the class teams.

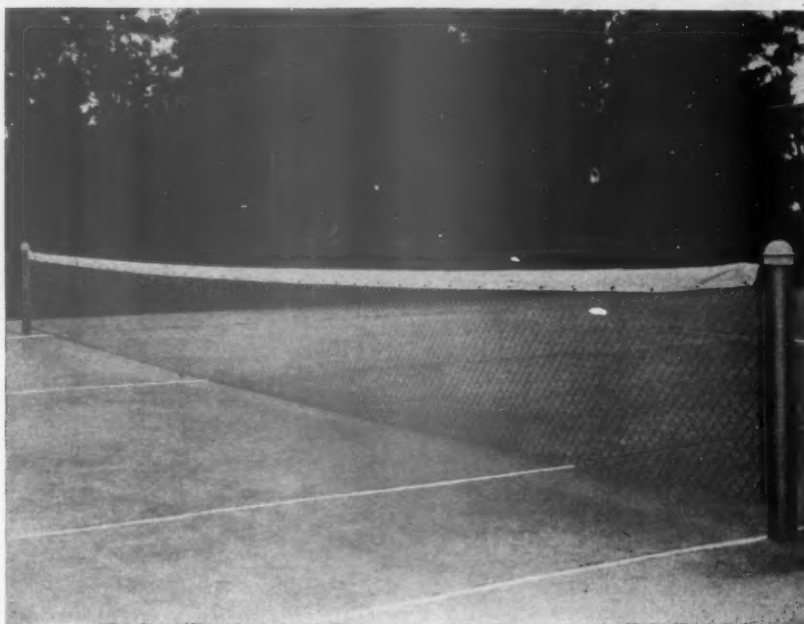
There is a Girls' Athletic Association or G. A. A. There are a G. A. A. Sponsor and a G. A. A. Board. There are student sport managers, class managers, and adviser room managers for each sport. A student leader's corps does all of the officiating. With this organization the program which follows is efficiently conducted.

FALL—Field hockey, soccer, swimming.

WINTER—Basketball, clogging and natural dancing, swimming.

SPRING—Tennis, golf, track, baseball, swimming.

There are no interscholastic athletics for girls. A point system is used as a basis for awarding the G. A. A. emblems.



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STYLE S: A very fine yellow back kangaroo sprint model. A light but very durable glove fitting shoe.



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STYLE K: Jumping shoe to Style N. With counter and two spikes in heel.



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Index to Advertisers

Absorbine, Jr.	43
Albion College Summer School	40
American Wire Fence Co.	55
Arcus Ticket Co.	34
Athletic Journal Posters	Inside back cover
Athletic Journal Track Pictures	46
Athletic Supply Company	46
Becton, Dickinson and Company	50
Brunswick-Balke-Collender Company	37
Burdick Corporation, The	26
Carpenter and Company, George B.	48
Chicago Gymnasium Equipment Co.	36
Circle A Products Corporation	42
Cramer Chemical Company	32
Denver Chemical Company	44
Drake Relays	28-29
Draper-Maynard Sporting Goods Co.	21
Firestone Footwear	51
General Electric Company	27
Giant Mfg. Company	24
Golden Sporting Shoe Company	45
P. Goldsmith Sons Company	39
Illinois Coaching School	22
Indiana Coaching School	54
Leavitt Mfg. Company	49
Lloyds, Inc.	36
National Carbon Company	47
Northwestern University Coaching School	25
Notre Dame Coaching School	33
Nurre Companies, The	53
Ohio State Relays	Inside Front Cover
Oregon State College Coaching School	38
Osborn Engineering Company	52
O'Shea Knitting Mills	Back Cover
Rawlings Mfg. Company	31
Reach, Wright and Ditson, A. J.	41
Riddell, Inc., John T.	56
Rocky Mountain Teachers Agency	54
Sand Knitting Mills Company	52
Servus Rubber Shoe Company	23
South Dakota Relays	48
Spalding and Bros., A. G.	35
Specialists Educational Bureau	54
Springfield College Summer School	30
Trico Fuse Mfg. Company	34
United States Rubber Company	2-3
Wade-Phelan Coaching School	50
Wayne Iron Works	46
Wilson-Western Sporting Goods Company	4
Witchell-Sheill Company	42
Wright-DeCoster, Inc.	40

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